**School of Marketing**
**Curtin Business School**

# Predictors of Channel Switching during Live Prime Time Television Advertising

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## DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

Signature: …….

Date: 30 October 2006

# ABSTRACT

The focus of this study is on viewers' channel switching behaviour during prime-time television advertising breaks. While the extent of channel switching has been studied repeatedly, the factors underlying channel-switching have not been extensively researched within a single study. To date, methodological limitations associated with self-reports, in-home cameras and electronic tracking data have restricted the scope for identifying the predictors of channel switching.

The study makes use of a dual observation/survey methodological approach that has been largely overlooked in this area of research. This approach makes it possible to determine the influence of previously untested potential predictors of channel switching. The aim of this study is to determine the influence of six identified predictors on television viewers' channel switching. The predictor variables tested include Perceived Clutter, Channel Proliferation, Attitude towards Television Advertising, Planned versus Impulse Viewing, Advertising Triggers and Remote Control Device (RCD) Empowerment. The last two predictors (Advertising Triggers and RCD Empowerment) result from factors drawn from a scale (SITUZAP) developed to measure the situational factors associated with channel switching. Moreover, the study determines the impact of these six predictor variables on observed channel switching (observed PROPZAP) across 1,283 observations as well as on reported channel switching (reported PROPZAP) across 848 respondents.

The empowerment provided by the RCD emerges as the dominant predictor of channel switching behaviour. Access to the RCD as a means of controlling the viewing environment is the foremost influencer of both observed and reported propensity to switch channels. However, while reported switching propensity is influenced by 'advertising triggers' (for example, a repetitive or irritating commercial) and 'perceived clutter' (too much advertising on television), observed switching propensity is unaffected by these factors.

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***This thesis is dedicated to my wife, Shirley, my daughter, Candice and my son, Kevin, who have added so much to my life's journey.***

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# CHAPTER ONE: INTRODUCTION

*"We pay more every year for network time. Fewer viewers are delivered, resulting in sky-rocketing inefficiency. Add to this the increasing loss of viewers at commercial breaks, and you begin to wonder at what point TV is no longer worth the price".*

*James Spaety*
*Group Manager (strategic research and planning)*
*General Foods Corporation*

## Overview

This chapter outlines the context for this study by establishing a background for the study as well as identifying and motivating the approach and scope and significance of the study. The background discussion provides selected coverage of the history of television, the evolution of the remote control device, television audience measurement, threats to television advertising audiences as well as opportunities for television advertisers. In terms of motivating the essence of this study, research focus and research questions are stated, the scope and methodology employed are outlined and the significance of the study is summarized. Finally, the organization of the thesis is presented on a chapter-by-chapter basis.

## Background

A general discussion of the evolution of the television and the remote control device provides an important contextual foundation for this study. This discussion evolves to clarify more specific contextual elements that underpin this body of work.

### *The History of Television*

Television (TV) was invented following almost fifty years of cumulative effort by hundreds of researchers. Although the first 'real' television system was built in 1909 by Georges Rignoux and Professor A. Fournier (Smith, 1998,

p.12), John Baird presented the first successful TV demonstration in 1926 (Burns, 1998, p.3). Modern broadcasting can be traced back to February 1937 with less than 3000 television sets in London homes receiving a television signal (Smith, 1998, p.19). However, the station was shut down in September 1939 at the start of World War II.

In the US, commercial television started in July 1941 (Smith, 1998, p.20) but was shelved by the bombing of Pearl Harbour in December of the same year (Burns, 1998, p.573). Scientific skills and materials vital to the functioning of the TV industry were placed at the government's disposal (MacDonald, 1994, p.19). Only after the war did television broadcast resume and by 1947, there were 60,000 television sets in the US, with two-thirds of these in New York (Smith, 1998, p.26).

However, early television was inflexible as broadcasters could only air programmes as they came off the network feed. Different time zones received the signal simultaneously, some at extremely inconvenient times. The first videotaped broadcast took place in November 1956. For the first time, stations could provide time-shifted delivery of viewing material at times of day that suited the local market (Smith, 1998, p. 21).

Major television based innovations occurred approximately every ten years from inception. The black and white television innovation of the 1950's was followed by colour television in the 1960's. The video cassette recorder (VCR) emerged during the late 1970's while cable and satellite television were innovations of the 1980's. Digital television appeared during the 1990's. However, recently there has been a plethora of new television-related innovations. PC-TV's emerged in 1999, Digital Video Disk (DVD) players in 2000, Personal Video Recorders (PVR) in 2001 and interactive television services in some countries by 2002 (Garland, 2002).

### *The Evolution of Television in Australia*

Television was introduced into Australia in 1956 (Stone, 2000, p.6). Two commercial licenses (Channels 7 and 9) were issued in both Sydney and Melbourne and the two state-run national stations were licensed. In 1957, both the Australian Broadcasting Commission (renamed Australian Broadcasting Corporation in 1983) and the two commercial suppliers extended to Brisbane, Adelaide, Perth and Hobart (Smith, 1998, p.210). Regional stations, controlled by regional stakeholders emerged by 1961 and a third commercial license was announced in 1963.

In October 1980, Special Broadcasting Services (SBS) was launched to serve Australia's growing multicultural minority groups (Smith, 1998, p.218). In 1992, SBS was placed under its own act of parliament and was authorized to broadcast advertising (between programmes) to supplement its revenue stream (Smith, 1998, p. 222).

### *Television's Impact on the Media Mix*

By the early 1950's television had already attracted more than half of the broadcast advertising dollars in the US (MacDonald, 1994, p.50). By contrast, exposure to newspapers, magazines and radio advertising fell by almost half (Balnaves & Varan, 2002). Arguably, the medium most affected by television was radio. The top-rated radio programme in the US had a rating of 26.5 in April 1943 but ten years later this had dropped to 8.5 (MacDonald, 1994, p.51). Time spent with television is now about five times greater than the total time spent with all other media (Comstock & Scharrer, 1999, p.96).

In recent years, marketing companies spent over US$125 billion worldwide each year on television advertising (Garland, 2002). The total marketing communications budget in Australia was A$25 billion in 2002 with A$8 billion directed towards above-the-line media (Butcher & McCulloch, 2003). Advertisers spend A$2.5 billion annually on television in Australia (O'Regan et al., 2002).

***The Evolution of the Remote Control Device (RCD)***

A television remote control is ”any device that allows the user to operate some or all of his/her television set’s functions from channel selection to audio bass control without the viewer having to physically touch the set itself” (Walker & Bellamy, 1993a, p.23).

Early remote control devices were pioneered during the late 1920’s for radio to enable the listener to control the set from the comfort of an armchair. The first versions were clumsy, about the size of a “two-pound chocolate box”. (Benjamin, 1993, p15).

The first television remotes were developed during the 1950’s but were connected by wires to the television set. Zenith developed the first wireless remote control in 1956. Viewers could advance or regress channel tuning from up to 40 feet away from the set (Benjamin, 1993).

However, TV buyers were slow to respond to the RCD technology during the 1960’s as the accessory added another $40 to $100 to the cost of a television set (Klopfenstein, 1993).

The ultrasonic wave RCD design was eventually improved by the infrared beam in the mid-1970’s. With the introduction of the VCR in the late 1970’s, the RCD had yet another device to address. Although some VCR’s had wired remote control devices, there were no wireless RCD’s for the VCR. Some high-end models were fitted with wireless RCD’s to enhance their appeal. Only by 1987 was a wireless RCD included with all VCR’s sold in the US. From 33% penetration in 1984, RCD’s rocketed to 63% penetration by mid-1988 in the US. This dramatic growth was driven by increased sales of VCR’s, TV sets and Cable Television (Klopfenstein, 1993, p31-33). By 1996, over 90% of US households had access to a remote control device, (Bellamy and Walker, 1996, p.2).

With the advent of multiple remote control devices in the home, universal remotes were developed. These can be programmed to override and replace all other dedicated RCD's, retailing for under US$20 by 1992. However, almost 80% of universal remotes were sold as replacements for lost or damaged units (Klopfenstein, 1993).

RCD's are now a fixture on the electronic media scene. They are provided as standard accessories to television sets, VCR's and cable television (Benjamin, 1993; Klopfenstein, 1993). "Today, remote control operators graze freely within the video fields, zapping commercials and checking out other channels – a process that is not looked upon favourably by advertising executives, television programmers and audience measurement firms" (Benjamin, 1993, p22).

***The Act of Watching Television***

Television viewing is traditionally a group activity. However, multiple television sets within the same household have become a means of meeting different viewing preferences among individual members and avoid the conflict due to channel switching (Kaufman & Lane, 1994). Based on a US study, 56% of TV viewing takes place in the living room, 20% in the family room and 14% in the bedroom (Clancy, 1994).

Approximately 80% of all television viewing tends to be ritualistic (viewers watch television for something to do regardless of content) while the remaining 20% is instrumental where viewers select programmes based on content (Comstock & Scharrer, 1999).

There are a variety of studies that measure the proportion of viewing time with eyes focused on the television screen. These vary from 47% (Steiner cited in Krugman, Cameron, & McKearney White, 1995) to 74% (Clancy, 1994). The famous dynascope study of 1965 found that the audience was attentive to the set 60% of the time. During the time when eyes are off the screen, respondents report that they spend 70% listening to the television (Clancy,

1994). Krugman, Cameron and McKearney White (1995) report on a study that used in-home videotaping and found that males look at the screen 63% of the time while females look at the screen 54% of the time.

In a study using observers, viewers had eyes-on-screen 62% of the time during programmes but only 33% of the time during commercials (Krugman et al., 1995). Notably, 94% of the commercials took place during a programme as opposed to being between programmes. For subjects who changed channels, eyes-on-screen was measured at 62% for the programme and 46% for commercials. Steiner reports that 47% of viewers paid full attention to the commercials (Krugman et al., 1995).

The correlation between eyes-on-screen and brand memory received only modest support (Krugman et al., 1995). There was some evidence to suggest that audio monitoring was sufficient for brand recall.

Many viewers do other things while watching television, including paperwork, eating, reading, household chores and crafts (Kaufman & Lane, 1994). Viewers engaged in competing activities such as chores or reading displayed significantly lower eyes-on-screen while complementary activities such as eating, drinking or conversations about the programme did not reduce eyes-on-screen time (Krugman et al., 1995).

***Television Audience Measurement***

In most countries, television audiences are monitored via the people meter. By attaching to the television set, this device is capable of monitoring whether the TV set is on, which channel it is tuned to and for how long. Panelists in the household are required to indicate when they are watching television by pressing a button on a small keypad (Beville, 1988, p.285). In this way, the size and demographic profile for viewers of each programme can be determined.

Since the people meter panel is drawn as a probability sample, viewing patterns can be extrapolated for the population at large. However, this method is not without its weaknesses which include obtrusiveness and 'button fatigue' (Beville, 1988, p.294). Children and women are less likely to push the buttons correctly – children through indifference and lack of understanding and women because they are more often engaged in household tasks (Comstock & Scharrer, 1999, p.90). A New Zealand study showed that 92% of panelists pushed the buttons on their people meter remote correctly (Danaher & Beed, 1993).

It is the programme audience rather than the audience watching the commercials that is reported. Television advertising rates are determined against the size of the programme audience as measured by the people meter system. However, advertisers are primarily interested in the size of commercial-break audiences (Cronin, 1995; Kitchen, 1986) particularly among potential consumers for the advertiser's brand (Kent, 2002).

Data from people meters provide only a quantitative assessment of audience size and demographics. There is no indication viewer involvement (O'Regan et al., 2002), attention and attitudes (Poltrack, 1997) or programme loyalty (Green & Trevaskis, 2002). Moreover, the people meter system may not distinguish between actual viewing, playing video games or using the video cassette recorder (VCR) to play back recorded material (Kaufman & Lane, 1994).

Television audience ratings are drawn from people meter data and are a measure of what is watched in quarter-hour periods. Any person who watches for at least 8 minutes in a quarter hour is classified as a 'viewer'. However, ratings data do not distinguish between those viewers who watch all 15 minutes and those who only watch 8 minutes (O'Regan et al., 2002).

There are a number of other problems associated with this measurement system including inadequate sample sizes for increasingly fragmented audiences (Balnaves & Varan, 2002; Ephron & Gray, 2001) and unreliable

response rates (Ephron & Gray, 2001; Garland, 2002). Not only are householders increasingly reluctant to participate in survey research (Garland, 2002) but response rates have been below 40% in the US when we factor in refusals, mechanical problems and non-response (Ephron & Gray, 2001). In this regard, Balnaves and Varan (2002) note that one of the challenges facing the industry is the erosion of confidence in television ratings data.

Ephron and Gray (2001) propose a switch to set-meter data to resolve the fragmentation and response problems associated with people meters. Set-meter data are passively gathered from all households, requiring no input from the viewer. However, since set-meter data applies only to households, individual viewer data would have to be modeled from people meter panels or independent surveys (Ephron & Gray, 2001).

The portable people meter (PPM) has been touted to succeed the people meter device. The portable version is worn on the viewer's person and its sensitive microphone identifies and time stamps inaudible television codes (Patchen & Harris-Kojetin, 2001). Before retiring, the user docks the PPM device into a recharging unit, which captures the day's television consumption data and downloads it to the research supplier.

With the dramatic advances in television technology in recent years, measurement systems are struggling to keep pace with new challenges (Kent, 2002). For example, monitoring time-shifted viewing following the introduction of the Personal Video Recorder (PVR), establishing new measurement and reporting systems for interactive television (Garland, 2002), monitoring new uses for television (such as DVD or game stations) and measuring the extent to which viewers multi-task while watching television (Balnaves & Varan, 2002). The use of viewer exposure ("opportunity-to-see") as a means of determining audience size needs to be reviewed (Balnaves, Ferrier, Phillips, & O'Regan, 2002). It may be that, at some future time, all television access is paid for. Heeter, Yoon and Sampson (1993) propose that viewers may control which and how many commercials they see in return for a commensurate reduction in cable fees.

***Threats to Television Advertising Audiences***

*(a) Channel Proliferation and Audience Size Erosion*

In the US, viewers had a choice of five viewing options in 1980. By 1997, the same viewer had a choice among approximately forty viewing options (Poltrack, 1997). The percentage of US households subscribing to cable services grew dramatically from 9% in 1970 to 64% in 1995 (Noll, 1999) and almost reached 78% of television households by 2000 (Rajgopal, 2001). As a result, audiences have diluted, driving the average prime time rating down from 17 (17% of viewers watching a particular programme simultaneously) at the end of the 1970's to around 12 by the end of the 1980's (Kaatz, 1986) and then to 8.9 by the end of the 1990's (Poltrack, 1997).

Network television audiences are being eroded by pay TV, video, computer gaming and the internet (Green & Trevaskis, 2002). As a result, television has become a less effective advertising vehicle (O'Regan et al., 2002).

*(b) Interactive Television*

Interactive television services give viewers something to do during ad breaks. For example, in the UK, game channels allow viewers to play three-minute quiz games during advertising breaks. Approximately one-third of households with access to interactive television are using it to bypass ad breaks (Balnaves & Varan, 2002).

(c) *Personal Video Recorders (PVR)*

New technologies, such as the PVR, pose a significant threat to advertiser sponsored television services (Balnaves et al., 2002). Personal Video Recorders, such as TiVo, are like VCR's with a computer hard disk built in. Multiple programmes can be recorded and stored while the device tracks viewer preferences and can automatically record programmes that the viewer

might like (Thomas, 2001). A study by CNW Marketing Research indicated that 72.3% of PVR owners skip television commercials (Friedman, 2002 as cited in Elpers, Wedel, & Pieters, 2003), while a Starcom study suggests that PVR-households are subject to 30% less television advertising than non-PVR households (Hicks, 2005).

Such devices have the capacity to detect commercials and respond by changing channels or eliminating ads (Klopfenstein, 1993; O'Regan et al., 2002). Apparently, 88% of commercials go unwatched by viewers with PVR boxes (Thomas, 2001). Klopfenstein (1993) reports that the idea of a device that can eliminate advertising appealed to about half of the adults polled.

*(d) Remote Control Devices*

The RCD is also a target for improvement. Voice recognition RCD's have already been developed (Heeter et al., 1993). Such devices will ultimately make the RCD redundant as the equipment owner can speak instructions directly to the unit (Klopfenstein, 1993).

Smart RCD's can 'learn' the viewers programme preferences and automatically switch to the next best programme during commercial breaks and return when the programme resumes.

***Opportunities for Television Advertisers***

Digital television can store many hours of viewing content on a single device such as a Personal Video Recorder (Balnaves & Varan, 2002). "The storage capacity of digital television could allow broadcasters to sell ads based on specific users rather than programmes" (Balnaves & Varan, 2002, p.101). Advertising messages could be tagged to download to specified homes only. This means that television commercial messages could be targeted to selected audiences only, so reducing unwanted advertising clutter. (Balnaves & Varan, 2002)

Moreover, digital television has the potential to elicit direct-responses to advertising messages. For example, fast food advertisers can entice viewers to pick up the remote control and order the advertised meal for delivery to their home (Balnaves & Varan, 2002).

Smart remote control devices may also be used to raise viewer involvement in programme or commercial content. For example, children can be engaged in a question-and-answer session based on the programme content viewed (Heeter et al., 1993).

***Background Underlying this Thesis Study***

This thesis is founded on a study that seeks to identify and evaluate a set of factors that influence television viewers' advertising avoidance behaviour. More specifically, the intent is to focus on those factors influencing channel-switching during prime-time television advertising.

Inherently, television stations compete to attract viewers to their programme offerings. The size of these viewing audiences drives the commercial television station's revenue stream. Television time is sold to advertisers who seek to expose the programme audience to a product, service or idea. Naturally, the larger the programme audience, the higher the rate paid by the advertiser.

Since advertising time is a limited resource, television stations are profitable only to the extent that they attract sufficiently large audiences. For commercial television stations, business performance is dependent upon the proportional relationship between audience size, advertising rates and profitability.

In mature markets, television commercials are typically clustered into defined breaks and are embedded into the programming. Viewers pay varying levels of attention to advertising messages and there is unquestionably some level of advertising avoidance for television commercials (Danaher, 1995; Heeter &

Greenberg, 1985; Rojas-Mendez & Davies, 2005; Speck & Elliott, 1997). The overall level of avoidance behaviour erodes programme audiences (Cronin, 1995) and this has obvious financial implications for both television stations and advertisers alike (Woolley, 2003).

The rate that advertisers pay for television advertising is based on the number of people watching the programme, not those who actually watch the commercials (Kaplan, 1985). In reality, media research companies do not report on the size of the advertising viewing audience. The advertiser pays for all programme viewers, all of whom have the 'opportunity to see' their television commercial (TVC). Of course, those viewers who choose not to watch the TVC's have been paid for, but not 'delivered' (Cronin, 1995). It is clearly in the interests of both the advertiser and the television station to keep advertising avoidance to a minimum.

New technologies, such as the Personal Video Recorder (PVR), video-on-demand and recordable DVD players advance the ways in which viewers can avoid television (Donaldson, 2005; Fass, 2005). This trend is likely to force agencies and their clients to find new ways to advertise on television (Donaldson, 2005) particularly as commercial time continues to 'cost more and deliver less' (Streisand, 2004). The technology trend is showing no signs of abating. Forrester forecasts that over half of US households will have some form of on-demand television by the end of 2007 (Donaldson, 2005). Clearly the television business model that has grown out of the 30-second television spot is in peril (Streisand, 2004).

Television advertising avoidance is expressed as the viewer's behaviour in 'passing over' the opportunity to see a TVC. It is extremely difficult to infer the viewer's motive for avoiding TVC's. For example, a viewer may leave the TV room during the commercial break to make a cup of coffee. How can that behaviour be attributed between wanting a cup of coffee or avoiding the ad break?

To resolve this problem, advertising avoidance is best framed in terms of the behaviour itself rather than the motive underlying the behaviour. For purposes of this study, a viewer who engages in any behaviour that associates with not seeing the commercial(s) on the channel that they are watching is understood to have avoided the advertising Viewers avoid television advertising in various ways. Leaving the room, talking, reading, dozing or switching the channel are some of the behaviours that viewers display when avoiding TVC's (Heeter & Greenberg, 1985; Kitchen, 1986; Speck & Elliott, 1997).

**Scope of the Study**

Broadly, the focus of this study is on the channel switching behaviour of television viewers. The study takes place during prime time (between 5.30pm and 10.30pm), which is typically associated with the largest television audiences. Channel switching behaviour is observed across five free-to-air Australian channels being Channels Seven, Nine, Ten, SBS and ABC. For those households subscribing to cable television, the switch to cable was also noted during advertising breaks but the observation did not discriminate among the various cable channels.

Geographically, the study is confined to West Australian television viewers residing in the capital city, Perth. Trained student observers perform the observation task, monitoring their household members in a hidden observation study.

More specifically, the purpose of this study is to investigate some of the factors that may predict channel switching during live prime-time advertising breaks. By definition, live viewing excludes any viewing of pre-recorded programmes, videos or DVD's.

## Research Focus and Questions

Three primary research questions posed in this study are listed as follows:

1. What situational factors in the context of television viewing contribute to channel switching?
2. What influence do identified potential predictors have on channel switching?
3. Does channel switching during advertising breaks vary across age or gender and for different programme genres?

## Theory Development

The bridge between theory and statements of hypothesis provides validation for the study. A number of key theories are identified as underpinning the research. These include Reactance Theory, Social Exchange Theory, Selective Exposure Theory, Play/Game Theory and Uses/Gratifications Theory. Each theory provides a theoretical foundation for one or more of the hypotheses proposed in this study. This component is presented and motivated in Chapter Four.

## Definition of Key Concepts and Variables

The study comprises six key independent variables that are tested as significant predictors of channel switching activity.

1. *Perceived clutter* is the viewers' perception of the extent of clutter as well as the irritation induced by television clutter (Ha & Litman, 1997; Speck & Elliott, 1998).

2. *Channel proliferation* is viewer's access to television channels. For purposes of this study, channel proliferation is a dichotomous variable expressed in terms of having or not having access to cable television within the household (Ferguson, 1992; Heeter & Greenberg, 1985; Kaatz, 1986).

3. *Attitude towards television advertising* is the viewer's personal attitude towards television commercials expressed in terms of the viewer's perception of television ads being interesting, enjoyable, informative and believable (Speck & Elliott, 1998).

4. *Planned versus impulse viewing* is a dichotomous variable that determines whether the viewer has either 'planned' or 'not planned' to watch the programme that he or she is viewing (Heeter & Greenberg, 1985; Speck & Elliott, 1997).

5. *Advertising triggers* is the channel switching behaviour triggered by the commercial itself, such as an 'irritating', 'disliked', 'recent' or 'often-repeated' ad.

6. *RCD empowerment* is the channel switching during advertising breaks that stems from the viewer's control over the viewing environment via the RCD.

Two primary dependent variables are also identified and defined in this study:

1. *The Observed Propensity to Zap Television Commercials (Observed PROPZAP)* is the observed percentage of time that the viewer is exposed to channels other than the programme channel during advertising breaks.

2. *The Reported Propensity to Zap Television Commercials (Reported PROPZAP)* is the viewer's personal estimate of the percentage of time that he or she is exposed to channels other than the programme channel during advertising breaks.

Finally, there are a number of key terms that arise during the presentation of this thesis. These are listed below as a source of reference for the reader.

*An advertising break* is the non-programme television material that includes both commercial messages and station messages (station identification / station promotions).

*Zapping* refers to the use of the remote control device to switch channel either during programme content or advertising breaks.

*Commercial zapping* refers to the use of the remote control device to switch channel during the advertising breaks.

*PROPLEAVE* is the percentage of advertising time that the viewer spends outside of the viewing room during the advertising breaks.

*PROPMUTE* is the percentage of advertising time that the television set is muted during the advertising breaks.

*The SITUZAP scale* refers to those scale items that characterize situational factors that trigger channel switching behaviour.

**Methodology Employed**

A primary contribution made by this study lies in its methodological approach. Previous research in this area has relied predominantly on self reports (Abernethy, 1991; Greene, 1988; Heeter & Greenberg, 1985; Kitchen, 1986; Speck & Elliott, 1997, 1998; Yorke & Kitchen, 1985) and electronic monitoring of television audience switching (Danaher, 1995; van Meurs, 1998; Zufryden, Pedrick, & Sankaralingam, 1993). The limitations imposed by these methodologies have resulted in a 'knowledge plateau'. In order to further extend the accumulation of knowledge into this area, a fresh methodological approach is essential.

Accordingly, this study seeks to advance the research into the area of channel switching among television viewers. Consequently, the study motivates and employs a synergistic approach using a combination of in-home observation and post-viewing surveys. The hidden observation phase monitors household members' channel switching behaviour while the viewer survey collects rich

viewer data such as Perception of Clutter, Attitudes towards Advertising, Planned versus Impulse viewing and access to Cable Television.

A member of the household observes the television commercial viewing behaviour of his or her household members over a specified period of time. The ideal observer is a Marketing Research student who can assume the role under the guise of completing a media-tracking university assignment. Since the viewer(s) select the location, viewing time and programming, this approach offers a naturalistic enquiry. On completion of the observation phase, the observer discloses his or her true intent and requests that household viewers complete a survey.

This approach determines the propensity to switch channels based on both an observational and a self-reported approach. In addition, the viewer survey is designed to measure a variety of partially tested or untested potential predictors of channel switching including Perceived Clutter, Channel Proliferation, Attitude towards Advertising, Planned versus Impulse viewing, Advertising Triggers and RCD Empowerment.

**Sample Size and Sampling Approach**

The sample comprises a total of 319 households comprised of 848 household members drawn from television viewers in metropolitan Perth. Sample respondents are members of the households in which the student observers reside. Each observer monitors the television viewing of between one and five household members over four observation occasions. The average household comprised 2.66 observed members. Finally, the study comprises a total of 1,283 observation sessions.

**Significance of the Study**

The study strives to add significant value to the determination of the predictors of channel switching during advertising breaks. The technology trend is for television users to be further empowered in the future and it is therefore vital

to consolidate and advance the research into television channel switching behaviour.

***Methodological Significance***

As previously stated, the implementation of the observation/survey approach provides the opportunity for fresh insights into the television channel switching environment. Although a version of this methodological approach has been applied in at least one previous study into this area (Cronin, 1995), the variation applied in this study is unique.

The methodology employed in this study targets dual quantitative and qualitative components of channel switching behaviour to provide a benchmark study in this research area. This methodological approach creates the opportunity for renewed comparison between observed and reported levels of channel switching. Moreover, this methodology exposes the potential for identifying additional predictors of channel switching behaviour.

***Conceptual Significance***

As a precursor to this study, a scale is developed (SITUZAP) to measure those situational factors that trigger channel switching. Although isolated situational factors have been identified in the literature as possible predictors of channel switching (Danaher, 1995; Siddarth & Chattopadhyay, 1998; van Meurs, 1998), no comprehensive work has been done to date to derive a scale to measure situational triggers of channel switching behaviour. In chapter three of this study, a scale is evolved to identify those situational triggers that give rise to channel switching. The factors that derive from the scale (Advertising Triggers and RCD Empowerment) are included into the conceptual framework proposed in this study.

### *Practical Significance*

The study offers notable contributions to both media planners and television station managers. Knowing the extent of channel switching behaviour among prime time television audiences empowers media planners to more accurately determine prime time advertising audience sizes. Moreover, as a result of this study, media planners will be able to adapt the scheduling of television advertising to accommodate those factors that predict the viewer's propensity to switch channels. More effective scheduling can be achieved once it is clear which factors trigger the act of channel switching.

By identifying the predictors of channel switching, television stations can schedule the presentation of commercial messages in order to curb audience erosion during the ad breaks. Clearly, the stakes are high in a television sector that attracts US$125b in advertising revenue per annum globally.

## Organisation of the Thesis

The thesis comprises seven chapters. An overview of the contents of each chapter is presented below to outline the organization of the thesis.

### *Chapter One: Introduction*

This chapter outlines the context for this study by establishing a background for the study as well as identifying and motivating the approach and scope and significance of this study. The background discussion provides selected coverage of the history of television, the evolution of the remote control device, television audience measurement, threats to television advertising audiences as well as opportunities for television advertisers. In terms of motivating the existence of this study, research focus and research questions are stated, the scope and methodology employed are outlined and the significance of the study is summarized. Finally, the organization of the thesis is outlined on a chapter-by-chapter basis.

***Chapter Two: A Review of the Literature***

This segment of work explores the literature relevant to television advertising avoidance and channel switching behaviour. Thereafter, the key studies in the area of television advertising avoidance are presented to highlight existing literature in this area. The discussion is refined to focus on channel switching behaviour. Predictors of channel switching behaviour are extracted from the literature for separate discussion. Each predictor is identified in terms of its relevance to the existing body of literature – Perceived Clutter, Channel Proliferation, Attitude towards Television Advertising, Planned versus Impulse Viewing, Access to a Remote Control Device, Situational Triggers and Demographic Factors. Finally, the large body of literature underlying two potential predictors – Attitude to TV Advertising and Television Clutter – is reviewed more extensively.

***Chapter Three: Scale Development***

This chapter identifies the situational triggers that may prompt a viewer to switch channels during television advertising breaks. Items drawn from the literature as well as from a group discussion are included to comprise a scale (SITUZAP) to measure situational triggers underlying channel switching behaviour. This chapter outlines the process undertaken to refine the SITUZAP scale. Fourteen scale items are derived. These reduce to eleven items which converge onto two orthogonal factors – Advertising Triggers and RCD Empowerment.

***Chapter Four: Research Background and Hypotheses***

In this chapter, the predictor and dependent variables are defined and included into a research framework. Key variables inherent in this study have derived from previous studies as well as from the scale development process. The underlying theoretical foundation is presented to ground the hypotheses proposed in this study. The hypotheses evolve from the literature review as a means of advancing knowledge in the channel switching and advertising

avoidance areas. The theoretical framework is outlined to provide a context and a theoretical rationale for each hypothesis. Each of six predictor variables is hypothesized to have a significant influence on one or both of the dependent variables, being the observed and reported propensity to zap television commercials (PROPZAP).

***Chapter Five: Methodology***

This chapter provides an overview of the research method and process adopted in this study. The research methodology represents a key component of the study since it enables the collection of data that has not previously been gathered in one study. Observation and survey techniques are used in tandem to provide both actual viewer channel switching data (per the observation) as well as viewers' input regarding perceptions, attitudes and viewing circumstances (per the survey).

The chapter outlines the research direction taken in this study from the first of two pilot studies through to the main study. A detailed description of the observation instrument, coding requirements and observer training are provided. Moreover, the development of the survey instrument is outlined, listing refinements that were made as the study progressed. Finally, the size and nature of the sample is discussed.

***Chapter Six: Results and Discussion***

In this chapter, the analysis, findings and discussion are outlined. Prior to the analysis, the assumptions of parametric data are verified, in which four underlying criteria are met. The results based on the analysis of the data set are reported and discussed simultaneously in order to support the continuity and flow of the research findings. Hypotheses are addressed, reported and findings are discussed in relation to each statement of hypothesis. This chapter reveals those factors that are significant predictors of observed channel switching (observed PROPZAP) and reported channel switching (reported PROPZAP). Observed PROPZAP is significantly associated with

RCD empowerment and age. Moreover, reported PROPZAP is significantly associated with RCD empowerment, advertising triggers and perceived clutter.

***Chapter Seven: Conclusion***

In this chapter, key findings are revisited and conclusions are drawn from the study. The importance of these findings is discussed in terms of the relevance for both academics and practitioners. Contributions made by this study are highlighted and limitations are outlined in order to draw attention to any weaknesses inherent in the methodological approach. Finally, the scope for future research that stems from this study is addressed, encouraging researchers to advance the accumulation of knowledge into this important area.

**Summary**

This chapter provides an introduction as well as a broad overview for the thesis. In addition to providing a background to the study, this chapter includes an outline of the research questions, methodology, significance and limitations of the study. Finally, the chapter concludes with a list of key definitions of terms and concepts that are essential to the study followed by an outline of the organization of the thesis.

# CHAPTER TWO: A REVIEW OF THE LITERATURE

## Overview

This segment of work explores the literature relevant to television advertising avoidance. Thereafter, the discussion is more specifically directed towards channel switching behaviour among television viewers. Key studies drawn from the channel switching or 'zapping' literature are summarized into a tabular format. Ten studies are reviewed spanning the period between 1985 and 2001.

Predictors of channel switching are extracted from the literature for separate discussion. These include 'perceived clutter', 'channel proliferation', 'attitude towards television advertising', 'planned versus impulse viewing', 'access to a remote control device', 'situational triggers' and 'demographic factors'. There is a significant body of literature underlying two potential predictors, being 'television clutter' and 'attitude to television advertising'. Given the extensive nature of these areas of study, separate attention is paid to the review of literature based on these areas. Thereafter, key studies drawn from the 'attitude towards advertising' literature are summarized into a tabular format. Eleven studies are reviewed between 1968 and 1998.

Finally, the chapter concludes with a discussion of the gaps in the literature. In particular, potential predictors of channel switching are identified for further research. The chapter concludes with a listing of the research objectives for this study.

## Introduction

A review of the literature performs a dual function. Firstly, it explores the context of the study to provide a overview of central issues. Secondly, it seeks to highlight what we already know and so identify potential gaps in the literature that merit further analysis. The discussion contained in this chapter starts by highlighting the literature central to the topics of TV advertising avoidance and channel switching. The review of literature gives rise to the

development of a scale to measure the situational triggers that underlie channel switching (Chapter three) as well as to the hypotheses that define this study (Chapter four).

**Television Advertising Avoidance**

Advertising avoidance is defined as all actions made by media users that differentially reduce their exposure to ad content (Speck & Elliott, 1997, p61).

The consumer's willingness to pay attention to advertising is necessary for advertising to do its work (Hallward, 2000; Patchen & Harris-Kojetin, 2001; Poltrack, 1997). Increased levels of television advertising avoidance are of great concern to advertisers as commercial television can no longer guarantee a relatively captive audience to the advertising industry (Walker & Bellamy, 1993a, p8).

Advertising avoidance is highest for television (Speck & Elliott, 1997, 1998) compared to other media forms. Physical avoidance of television advertising includes cognitive and/or behavioural avoidance (Speck & Elliott, 1997). This includes leaving the room, dozing off (Kaatz, 1986) or diverting attention away from the television set, usually to converse or read (Kitchen, 1986). In essence, people use the television commercial breaks to do other things (O'Donohoe, 1994; Speck & Elliott, 1997).

Mechanical avoidance includes the use of a remote control to fast forward a videotape so as to bypass non-programme content ("zipping") or switch channels ("zapping") during commercial breaks. In recent years, advertising avoidance has been fuelled by the emergence of Video Cassette Recorders (VCR), cable television, remote control devices and advertising clutter (Cronin, 1995; Kitchen, 1986; Nakra, 1991; Speck & Elliott, 1998; Webb & Ray, 1979).

Avoidance rates vary considerably for different studies. Abernethy (1991) reports that one or more viewers left the room during 36% of the commercials.

Fifty per cent of viewers report to avoid advertising by leaving the room, changing channels or muting the commercial breaks (Mittal, 1994). Cook (1994) reports that, in a pilot study for a passive people meter, Nielsen Media Research notes that only 5% of the audience leave the room on average during commercial breaks while Hallward (2000) states that most viewers are doing something else during commercial breaks and/or leave the room.

### *'Zapping' and Television Advertising Avoidance*

Consensus for the meaning of the word "zapping" took some time to emerge from the literature. It has been described as fast-forwarding of video-taped commercials (Kitchen, 1986; Tauber, 1985), muting of commercials while on air (Tauber, 1985) and channel switching (Kaplan, 1985). Over time, consensus prevailed and "zapping" now refers to channel switching during live television broadcasts (Danaher, 1995; Heeter & Greenberg, 1985; Kaplan, 1985; Wenner & O'Reilly Dennehy, 1993; Zufryden et al., 1993).

More specifically, TV channel switching during commercials is referred to as "commercial zapping" (Zufryden et al., 1993). Commercial zapping accounts for a significant portion of television advertising avoidance behaviour (Abernethy, 1991; Heeter & Greenberg, 1985; van Meurs, 1998). In addition, commercial zapping appears to be a good predictor of other forms of advertising avoidance such as zipping and leaving the room (Abernethy, 1991).

Commercial zapping estimates vary considerably from one study to the next. Based on a 1991 study, Moriarty (cited in Cornwell et al., 1993) found that only 40% of the fifty commercial breaks observed included one or more channel changes. Cronin (1995) reports on the percentage of commercials zapped, noting that 30% of all commercials were zapped in an in-home observation study. In terms of audience avoidance behaviour, some studies report on the percentage of audience that zap commercials. Such studies report a variety of findings including 16% (Greene, 1988; Kaatz, 1986), 60%

(Cronin, 1995), between 50% and 67% (Heeter & Greenberg, 1985), 67% (Mittal, 1994) and 81% (Tse & Lee, 2001).

Other studies report on the percentage of commercial time that was avoided. Again, a variety of results have been reported including 3.4% (Siddarth & Chattopadhyay, 1998), 5% (Zufryden et al., 1993), 10.4% (Danaher, 1995), 28.6% (van Meurs, 1998), between 45% and 60% (Abernethy, 1991), and 61% (Moriarty & Everett, 1994).

The variation in these findings may be attributed to a number of sources. For example, national differences exist among respondents in Hong Kong (Tse & Lee, 2001), the Netherlands (van Meurs, 1998), the US (Greene, 1988; Heeter & Greenberg, 1985; Speck & Elliott, 1997), New Zealand (Danaher, 1995) and the UK (Kitchen, 1986; Yorke & Kitchen, 1985). Moreover, while most studies are based on self-reported zapping behaviour (Abernethy, 1991; Greene, 1988; Heeter & Greenberg, 1985; Kitchen, 1986; Speck & Elliott, 1997; Yorke & Kitchen, 1985) others make use of objective mechanical tracking devices such as people meters (Danaher, 1995; Kneale, 1988; Siddarth & Chattopadhyay, 1998; van Meurs, 1998; Zufryden et al., 1993). Finally, while some studies report on channel switching exclusively (Cronin, 1995; Danaher, 1995; Heeter & Greenberg, 1985; Siddarth & Chattopadhyay, 1998; van Meurs, 1998), others define their measurement in terms of advertising avoidance across different media (Speck & Elliott, 1997).

In some cases, sampling procedures are non-random (Cronin, 1995; Kitchen, 1986; Yorke & Kitchen, 1985), others are skewed by admission of the authors (Abernethy, 1991; Speck & Elliott, 1997) while some are representative of national populations (Danaher, 1995; Tse & Lee, 2001; van Meurs, 1998). Growing access to remote control devices impacts on the data as studies range from between 1985 (Cronin, 1995; Heeter & Greenberg, 1985; Yorke & Kitchen, 1985) and 2001 (Tse & Lee, 2001). Consistency is also compromised as some studies are conducted over a period of days (Cronin, 1995; Danaher, 1995; Tse & Lee, 2001) while others collect data over weeks, months or even years (Heeter & Greenberg, 1985; van Meurs, 1998; Zufryden

et al., 1993). Therefore, it is highly imprudent to attempt to draw meaningful comparisons across the different studies.

### *Summary of Key Commercial Zapping Literature*

At this stage, it is beneficial to draw a comparison among key papers in the channel switching or zapping literature. Table 2.1 provides a summary of the most important studies in this area over a period of sixteen years. The summary of work begins with two seminal papers written in 1985 (Heeter & Greenberg, 1985; Yorke & Kitchen, 1985) and covers a total of ten papers culminating in a paper written in 2001 (Tse & Lee, 2001). Only a handful of papers have had significant bearing on the channel switching literature. This summary provides an insightful comparison among these studies, drawing attention to sample size, respondent group, method of data collection, external validity and a summary of findings.

**Table 2.1 Summary of Key Commercial Zapping Literature**

| Year/ Journal | Author | Purpose | Sample size | Respondents and response rate | Data collection | External validity | C'ntry | Findings |
|---|---|---|---|---|---|---|---|---|
| 2001 JAR | Tse and Lee | Comparison between the brand recall of zappers versus non-zappers | 360 | TV viewers aged 15 or older | Telephone interviews at the end of prime time break | Systematic random sampling from phone book | HK | 80.8% are zappers<br>Non-zappers can recall more brands than zappers<br>Zappers had highest recall for the last two TVC's – 77% of brands recalled<br>Only 4% of TVC's recalled by zappers were in the first 2 positions |
| 1998 JAR | Van Meurs | Extent of zapping<br><br>Identify the factors that impact zapping behaviour | 2400 people 6 years or older | Members of the people meter panel in the Netherlands | People meter data – minute by minute ratings over a 4 month period | | NTH | Recall surveys are subject to memory and social desirability effects<br>Laboratory observation may produce contrived behaviour<br>In-home observation are typically with smaller samples<br>People meter research is ideal but only quantitative<br>Type of product, frequency of exposure, irritating commercials falling outside the target market do not affect commercial zapping<br>28.6% stop watching or zap the commercials<br>7.1% increase in audience by new viewers<br>People zap to stop viewing or to see what's on elsewhere |
| 1997 JA | Speck and Elliot | Identify the predictors of advertising avoidance in four media categories | 946 adults | National consumer panel 63% | Mail survey (self reported behaviour) | Sample skew to females, higher educated and not enough ethnic diversity | US | TV ads are avoided more than other media forms<br>Zappers are higher income and younger<br>Viewers of many channels are more likely to zap<br>'Annoying', 'Believable', 'Wastes my Time' are significant to television advertising avoidance<br>Attitudes towards advertising and communications problems are the most influential indicators of advertising avoidance |

**Table 2.1 (continued) Summary of Key Commercial Zapping Literature**

| Year/ Journal | Author | Purpose | Sample size | Respondents and response rate | Data collection | External validity | C'ntry | Findings |
|---|---|---|---|---|---|---|---|---|
| 1995 JAR | Danaher | Measuring audience levels during commercial breaks | 1100 | People meter panelists | Second by second tracking | Representative of the New Zealand market | NZ | TVC's are avoided at random<br>Older viewers are more likely to watch commercials<br>Access to remote controls, metropolitan viewers and higher income viewers tend to avoid more TVC's<br>Viewers of soaps and game shows are more likely to remain tuned for the breaks<br>The more 15 second TVC's during the break, the smaller the drop-off in ratings<br>Seven TVC's retains the highest audience ratings<br>High programme ratings equate to high ad break rating<br>Viewers avoid ads only 10% of the time -3 channels |
| 1993 JAR | Zufryden, Pedrick, Sankaralingam | Zapping<br>- impact of remote, cable TV and VCR<br>- impact on brand purchase behaviour | 584 h/holds | ACN single source consumer panel | Tracking via single source scanner panel data and people meters | Yoghurt purchases only | US | 5% of yoghurt TVC's were zapped<br>The majority of zapping is during programming with TVC zapping of 25% - 33% of all zapping behaviour<br>Remote controls, VCR and cable TV increase zapping behaviour<br>Multiple person households, household income, children under 18 and education increase zapping<br>Zapped commercials are more effective than non-interrupted TVC's |
| 1991 AAA confer | Abernethy | Measure the combined impact of physical and mechanical avoidance | 350 | Adults in households | Telephone interviews<br>- self reports of household (not individual) zapping behaviour | Skew towards whites, higher education and income levels | US | 88% of households had at least one remote control<br>74% of households had a VCR<br>70% of taped commercials are zipped<br>At least one left the room during 36% of the TVC's<br>40% of commercials are zapped<br>Zapping is positively correlated with channels available, channels viewed, no. of remotes, household size and higher income but not to exposure<br>Zappers are more likely to leave the room and zip |

**Table 2.1 (continued) Summary of Key Commercial Zapping Literature**

| Year/ Journal | Author | Purpose | Sample size | Respondents and response rate | Data collection | External validity | C'ntry | Findings |
|---|---|---|---|---|---|---|---|---|
| 1988 JAR | Greene | Zapping and zipping rates for respondents in a copy testing survey – programme exposure guaranteed | 4000 | | In-home viewing DART and Self-reported zapping behaviour | Gallup & Robinson copy testing | US | 8% claim more than half the TVC's were zapped<br>16% claim that some of the TVC's were zapped<br>Men are more active zappers than women<br>1% zipped TVC's from a recording<br>Recall of TVC's was the same for remote/no remote<br>Zapper's recall was only mildly lower than non-zappers |
| 1986 IJA | Kitchen | Zapping rates comparison between middle and end of programmes | 100 | TV viewers from 4 socio-economic groups<br>100% | Personal Interview (self reported) | Portion of the UK population | UK | 68% potential audience loss from zapping at the end of the programme with 44% during mid-programme<br>No gender or socio-economic differences in zappers emerged |
| 1985 JAR | Heeter and Greenberg | Who are the zappers? | 1500 adults<br><br>400 children | | Five different surveys over 2 years (self reported) | Unknown | US | 50% to 67% do some level of commercial zapping<br>Limited demographic differences - Men and young adults are more likely to report zapping behaviour<br>Zappers have more access to remote controls<br>Zappers are less likely to plan their viewing, are less likely to watch the entire show, are familiar with more channels and have a wider viewing repertoire<br>Commercial zapping is a way of re-evaluating their choice<br>Reasons for zapping include 'to see what's on', avoid commercials, boredom, variety seeking and multiple show watching |
| 1985 JAR | Yorke and Kitchen | How are VCR's and remote controls affecting viewer behaviour during commercial breaks? | | TV viewers from 4 socio-economic groups who possess a VCR or remote control<br>100% | Personal interview (self reported) | Judgment sample Portion of the UK population | UK | Respondents viewed an average of 1.8 – 3.2 hours per week of material recorded from commercial TV and 6 – 8 hours per week of pre-recorded material<br>Most VCR viewing is during prime time (8pm-10pm)<br>91% zip |

### *Patterns of Zapping Behaviour*

*Viewers have an almost uncanny sense of the pattern of the commercial interruptions during the programmes they often watch (Webb & Ray, 1979).*

Zapping is not confined to commercial breaks. Viewers zap during both programme and non-programme content (Krugman et al., 1995; Zufryden et al., 1993). Estimates of zapping rates vary widely among studies. Kaye (1994) reports that, on average, households zap once every one minute and 38 seconds. Nakra (1991) proposes that the average household zaps once every three minutes and 42 seconds (McDonald, 1996; Nakra, 1991) while Selnow (1989) reports that heavy grazers switch more that once every two minutes and light grazers change channel once every 20 minutes (Kaye, 1994, p.36). Cornwell et al. (1993) state that, on average, zapping occurred once every 11.2 minutes of time spent viewing commercials.

Although the weight of literature points to more commercial zapping than programme zapping (Abernethy, 1991; Cornwell et al., 1993; Danaher, 1995; Kaplan, 1985; Krugman et al., 1995), there are some findings to the contrary (Jonas, 1996; Kaye, 1994; Zufryden et al., 1993).

Most programme zapping occurs at the beginning (Kaplan, 1985) or the end of a programme (Kaplan, 1985; Kitchen, 1986; McDonald, 1996; Siddarth & Chattopadhyay, 1998), particularly during the first and last five minutes (McDonald, 1996; Nakra, 1991). Whereas 23% report that they are quite or highly likely to 'flick channels' during mid-programme, 54% are prepared to do so at the end of the programme (Kitchen, 1986). This may be exacerbated when gaps between programmes are too long and predictable (Kaplan, 1985) such as where end-credits are shown (McDonald, 1996). On the contrary, Kaye (1994) reports that viewers are slower to make the first channel switch (2 minutes and 26 seconds) between 3 minutes before to 3 minutes after the hour compared to other time intervals.

Channel switching is particularly heavy within the first five to ten seconds of commercial breaks (Abernethy, 1991; Cronin, 1995; Nakra, 1991). This pattern suggests that advertising avoidance is a learned pattern of response to advertising in general rather than a response to specific commercials (Cronin, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1997). Cronin (1995) notes that 82% of ads are zapped within five seconds of the start of the ad indicating an automatic (advertising avoidance) rather than a considered (discriminatory) response. Tse and Lee (2001) report that zappers are more likely to switch channels quickly and therefore display minimal recall (4%) for the first two positions. They demonstrate highest recall (77%) for the last two commercials in the pod (Tse & Lee, 2001). By contrast, Cronin (1995) reports that the first ad in the pod consistently enjoys the highest audience rating.

Stout and Burda (1989) report that flipping through channels interferes with the viewer's ability to process advertising information (p.32). However, the act of zapping does appear to increase the level of attention paid to the advertising (Greene, 1988; Hallward, 2000). Krugman et al. (1995) found that zappers had their eyes on the screen for 46% of the time compared to 33% for non-zappers. Moreover, ads that are zapped sometime after they have begun enjoy a stronger relationship with brand choice behaviour than non-zapped ads (Zufryden et al., 1993).

**Profile of the Commercial Zapper**

The profile of the zapper is relevant to those who prepare and deliver advertising messages. There is evidence to suggest that zapping is impacted by specific characteristics and influences (Abernethy, 1991; Danaher, 1995; Heeter & Greenberg, 1985; Kitchen, 1986; van Meurs, 1998). It is clear that not all viewers zap equally. For instance, Kneall (1988) reports that 18% of viewers are heavy zappers, switching channels more than once every two minutes while Abernethy (1991) notes that 15% of households zap 75% or more of the television commercials to which they are exposed. Cable Television Administration and Marketing (CTAM) identify a young, recently wed and affluent sub-group among cable viewers ("restless viewers") who are prolific zappers, tend not to plan their viewing and make up 23% of cable viewers (Bellamy and Walker, 1996, p33).

Zappers are more likely to have grown up with television, have parents or siblings who are heavy zappers (Krendl, Troiano, Dawson, & Clark, 1993) and have a wider viewing repertoire. In addition, commercial zappers are more likely to be technologically adept (Wenner & O'Reilly Dennehy, 1993), watch two or more programmes simultaneously and are less likely to watch an entire show (Heeter & Greenberg, 1985).

However, zappers do not watch more television than non-zappers. Both groups are exposed to an equivalent amount of television (Abernethy, 1991; Heeter & Greenberg, 1985; van Meurs, 1998).

Reasons for commercial zapping include 'to see what's on TV' (Heeter & Greenberg, 1985; van Meurs, 1998; Walker, Bellamy, & Traudt, 1993c), to sample other programmes (Kaatz, 1986), to avoid commercials (Heeter et al., 1993; Walker et al., 1993c), to annoy others (Heeter et al., 1993), to control family viewing (Bellamy & Walker, 1996, p3), variety seeking, multiple show watching (Heeter & Greenberg, 1985) and accessing music videos or news (Walker et al., 1993c).

## Factors that Influence the Propensity to Zap Commercials

A number of factors that influence the propensity to zap television commercials have been identified in the literature (Danaher, 1995; Heeter & Greenberg, 1985; Kitchen, 1986; Lee & Lumpkin, 1992; Mittal, 1994; Perse & Ferguson, 1993; Speck & Elliott, 1997; Walker et al., 1993c; Zufryden et al., 1993).

### *(a) Perceived Levels of Clutter*

Perceived advertising clutter is defined as a consumer's conviction that the amount of advertising in a medium is excessive (Speck & Elliott, 1998). The privatization of television services has led to an increase in advertising levels which raises the level of 'clutter' from the viewer's perspective. In turn, high levels of perceived clutter are significantly associated with advertising avoidance (Chang-Hoan & Hongsik, 2004; Speck & Elliott, 1998). A contrary view proposes that although there is more clutter during daytime programming compared to prime-time television, the incidence of zapping is lower during daytime viewing (Kaufman & Lane, 1994).

Danaher (1995) notes that the number of advertising breaks to which the viewer is potentially exposed increases zapping behaviour. The number of television commercials in a pod also appears to have an impact on commercial viewing. Seven commercials is the ideal number with more or fewer commercials associated with higher levels of avoidance (Danaher, 1995). The length of the commercial pod is also a contributing factor. McDonald (1996) reports that for a period up to four minutes, 19% engaged in commercial zapping while after five minutes, this increased to 35%. These findings are consolidated by studies that report higher levels of recall being associated with shorter commercial breaks (Galpin & Gullen, 2000; Zhao, 1997).

Although the higher incidence of shorter 15-second commercials increases perceived clutter (Kaatz, 1986), it appears to reduce the incidence of

commercial zapping (Danaher, 1995). It is not clear whether the shorter format creates greater expectation for returning to the programme or if the commercials seem shorter and therefore less irritating. Elpers et al. (2003) support this view, noting that the longer the duration of a TVC, the greater is the likelihood that consumers will elect to stop viewing the commercial. However, the advantage of the 15-second commercial is partly offset by the higher exposure rates and potential for quicker wear-out (Siddarth & Chattopadhyay, 1998).

The 'clutter' literature represents a relatively large body of work. An analysis of this work is separately reviewed in a later section of this chapter in order to provide a more extensive overview of this important area.

***(b) Channel Proliferation***

"All media are becoming less effective advertising vehicles. Network TV draws nowhere near the audiences it did a decade or two ago. Major newspapers and magazines struggle to keep their circulation stable. The dynamic is simple: more media choices are making audiences more fragmented and more advertising messages are making people numb". (Jonathan Weber cited in O'Regan et al., 2002, p.25).

The advent of additional commercial channels during recent decades, including cable television has dramatically increased viewer selection options (Perse, 1990). Channel proliferation has created a 'zapper's oasis' since the zapper is virtually guaranteed to find something to watch during the commercial break (Kaplan, 1985). Kaye (1994) reports that US based participants watched an average of 6.3 different channels. In this study, participant household's viewing activity was electronically monitored over four days and any channel watched continuously for at least four minutes was included into the household's channel repertoire (Kaye, 1994, p.88). As expected, those viewers who watched for a longer time had larger channel repertoires than those who watched for a shorter period.

Zapping behaviour is positively correlated with both channels available and channels viewed (Abernethy, 1991; Kaye, 1994; McDonald, 1996; Speck & Elliott, 1997; Zufryden et al., 1993). As can be expected, heavy zappers have a larger channel repertoire (8.6) than light zappers (3.8) (Kaye, 1994, p.114). Heeter and Greenberg (1985) report that cable viewers change channels more often during commercials than non-cable viewers (Kaye, 1994, p.44). Moreover, multi-channel viewing has reduced the level of attention paid to commercials (Krugman et al., 1995).

### *(c) Attitude towards Television Advertising*

Viewer perceptions of TV advertising provide a strong indication of likely avoidance behaviour (Lee & Lumpkin, 1992; Mittal, 1994; Speck & Elliott, 1997). In general, heavy television commercial (TVC) avoiders ("almost always zaps") have a more negative attitude towards TV advertising than light ("rarely zaps") and moderate ("sometimes zaps") avoiders (Lee & Lumpkin, 1992).

Higher levels of ad avoidance occur among viewers who rate television advertising as less informative, less useful (Lee & Lumpkin, 1992), less believable and more annoying (Speck & Elliott, 1997). Moreover, higher avoidance is associated with the view that television advertising is a 'waste of my time' (Speck & Elliott, 1997) and 'leads to wasteful buying' (Lee & Lumpkin, 1992). Finally, a positive attitude towards advertising is reported to reduce advertising avoidance (Rojas-Mendez & Davies, 2005).

The 'attitude towards television advertising' literature represents a relatively large body of work. An analysis of this work is separately reviewed in a later section of this chapter in order to provide an extensive overview of this area of interest.

### *(d) Planned versus Impulse Viewing*

Selecting what to watch in advance is the 'deliberate search for information about programme content, times and alternatives' (Perse, 1990). Viewers state that they 'plan in advance to watch a programme of interest' around half of the time (Clancy, 1994; Kaye, 1994) while men are less likely than women to plan their viewing (Heeter, D'Alessio, Greenberg, & McVoy, 1988). Only around 20% of viewers use a television guide regularly (Lin 1990 cited in Comstock & Scharrer, 1999).

Unplanned or impulse television viewing (Heeter & Greenberg, 1985) and low programme guide use (Wenner & O'Reilly Dennehy, 1993) are more likely to result in commercial avoidance as the viewer seeks to 'see what else is on'. Zapping during commercials gives the viewer an opportunity to re-evaluate their choice of channel (Heeter & Greenberg, 1985).

Conversely, greater use of television programme guides is associated with lower reliance on the RCD for programme selection (Kaye, 1994, p.48). Moreover, people who specifically chose to watch a programme recalled 35% more commercials than those who watched for other reasons (Galpin & Gullen, 2000).

However, not all studies support the association between television guide usage and lower rates of channel switching (Kaye, 1994; Perse, 1990). Kaye (1994) finds that "participants who report using a television programming guide as the way they most often select a programme to watch do not make fewer channel changes per hour on average" (Kaye, 1994, p.106). Cronin (1995) reports only a modest correlation (r = 0.24) between zapping and programme loyalty (expressed as the stated frequency of watching the programme).

### *(e) Access to a Remote Control Device*

Access to a remote control device is a strong predictor of zapping behaviour (Abernethy, 1991; Heeter & Greenberg, 1985; McDonald, 1996; Zufryden et al., 1993). The remote control device (RCD) is likened to an “air mouse” that converts the television viewer into a television user (Bellamy and Walker, 1996, pp. 2,4). The technical capability of the RCD dictates the way in which it is used by the viewer and so it has the potential to change viewer behaviour (Heeter et al., 1993).

The RCD offers the user instantaneous control to select a customized viewing mix from broadcast, cable and VCR sources (Bellamy and Walker, 1996, p.4) to maximize viewer gratification (Bryant & Rockwell, 1993) and by serving as a ‘catalyst for grazing’ (Wenner & O'Reilly Dennehy, 1993). Grazing includes muting, zapping, flipping and switch hitting (Kaye, 1994, p.9). Flipping is switching through all the available channels by using the ”up/down” button while switch hitting is simultaneously viewing two or more programmes by using the “recall” function on the RCD.

The proliferation of remote control devices via the sale of television sets and VCR’s led to most US households being in possession of an RCD by 1990 (Abernethy, 1991; Krugman & Rust, 1993). By 1996, over 90% of US households had access to a remote control device, up from 29% in 1985 (Bellamy and Walker, 1996, p.2). By mid-1995, 87% of all TV homes in Western Europe had access to remote control devices (Jonas, 1996).

Selective avoidance is significantly related to RCD use (Walker et al., 1993c, p111; Wenner & O'Reilly Dennehy, 1993). Based on a 1988 study, Ainsley (cited in Cornwell et al., 1993, p44) found that 67% of remote control users graze frequently. Frequent users of the RCD report watching a greater variety of channels (10.1 channels) compared to television viewers who rarely use it (6.4 channels). Danaher (1995) notes that access to a VCR/remote control device is the most important predictor of household zapping behaviour.

Remote control devices empower television viewers to avoid commercials (Walker et al., 1993c; Wenner & O'Reilly Dennehy, 1993). In a study by

Walker, Bellamy and Traudt (1993c), avoiding commercials was found to be the second highest rated reason (after 'finding out what's on TV') for using the RCD.

Females dominate the RCD in only 15.2% of households (Copeland & Schweitzer, 1993). Ainslie (cited in Perse & Ferguson, 1993) notes that more than half those woman who are forced to graze by other members of household enjoy television less during grazing. Women are more likely to pair other activities such as completing household chores with television viewing and therefore have less opportunity to zap commercials (Kaufman & Lane, 1994). However, it appears that male dominance of the RCD applies more to older men. Younger men and women do not differ significantly in how often they change channels (Perse & Ferguson, 1993).

Although zappers have more access to remote control devices, they do not seem to be 'gadget or technology seekers' since they have no more VCR's, video games or home computers than non-zappers (Heeter & Greenberg, 1985). Notably, VCR's are purchased for the primary purpose of time-shifting (Lee & Lumpkin, 1992) and viewing pre-recorded rentals (Krugman & Rust, 1993) - not for avoiding advertising. Moreover, there are no significant differences between VCR owners and non-owners in their attitude towards advertising (Lee & Lumpkin, 1992). Despite that the RCD innovation was originally conceived by Zenith Manufacturing to empower viewers to avoid advertising (Bellamy and Walker, 1996, p.19), this does not appear to provide an impetus for VCR buyers. Primarily, the VCR buyer seeks a recording facility and the remote control provides an incidental benefit. The RCD is generally regarded as an "extension of other technologies rather than an independent innovation" (Bellamy and Walker, 1996, p.2).

***(f) Situational Triggers***

This refers to those triggers that may provide the stimulus for zapping a commercial. For example, a repeated ad, an irritating commercial or the viewer's mood may trigger a channel switch.

The content of the commercial (Rojas-Mendez & Davies, 2005) in conjunction with the viewer's mood and arousal states (Bryant & Rockwell, 1993, p74) influences the likelihood of it being zapped. Commercials that evoke feelings such as pleasure and arousal are less likely to be zapped compared to commercials that communicate factual information (Olney, Holbrook, & Batra, 1991). Moreover, both the level and velocity of the entertainment value built into a TVC reduces the likelihood that consumers stop viewing the ad providing that the informational value is kept to a minimum (Elpers et al., 2003).

Despite that 89% of respondents admitted to be irritated by frequent repetition (Mittal, 1994), the level of irritation experienced by the viewer does not appear to affect commercial zapping (van Meurs, 1998). Nevertheless, previously unseen commercials enjoy a lower incidence of zapping (Siddarth & Chattopadhyay, 1998) relative to 'already seen' commercials and fully exposed ads.

Chapter 3 is devoted to further exploring situational factors that trigger channel switching. A scale is developed and refined for purposes of measuring this important potential predictor of commercial zapping behaviour.

***(g) Demographic Factors***

Demographic factors play a minor role in RCD use (Wenner & O'Reilly Dennehy, 1993) and account for only 7.6% of the variance in TV advertising avoidance (Speck & Elliott, 1997).

There is no consensus in the literature regarding the demographic profile of the commercial zapper. Studies in this area report that zappers tend to be predominantly male (Copeland & Schweitzer, 1993; Greene, 1988; Heeter & Greenberg, 1985; Krugman et al., 1995; Perse & Ferguson, 1993; Walker et al., 1993c), single (Speck & Elliott, 1997), younger (Heeter & Greenberg, 1985; Jonas, 1996; McDonald, 1996; Speck & Elliott, 1997; Zufryden et al.,

1993), higher education/income (Abernethy, 1991; Speck & Elliott, 1997; Walker et al., 1993c; Zufryden et al., 1993) and from larger households (Abernethy, 1991; Zufryden et al., 1993). Men are more likely to switch channels to avoid commercials, watch multiple programmes or seek variety whereas women are more likely to switch channels to watch a particular programme (Perse & Ferguson, 1993).

On the other hand, there are studies in which marital status (Heeter & Greenberg, 1985), gender (Cronin, 1995; Danaher, 1995; Kitchen, 1986; Speck & Elliott, 1997), household size (Heeter & Greenberg, 1985), age (Cronin, 1995; Danaher, 1995), income (Heeter & Greenberg, 1985) and socio-economic status (Kitchen, 1986; Speck & Elliott, 1997) are reported to play no apparent role in commercial zapping behaviour.

***(h) The Nature of the Programme***

The nature of the programme also influences commercial audience size. Highly rated programmes have greater audience retention during commercial breaks (Danaher, 1995; Galpin & Gullen, 2000; Krugman et al., 1995; Poltrack, 1997). Although programmes with greater viewer appeal are associated with more attention being paid to the commercials, this does not necessarily increase brand recall (Krugman et al., 1995).

Soaps and game shows appear to have the highest loyalty for both programme and advertising content. In addition to retaining their viewers during advertising breaks, game shows also attract 'grazers' from other channels (Danaher, 1995). Male dominated programmes such as sports programmes are highly prone to grazing, particularly for slower moving sports such as baseball (S. T. Eastman & Neal-Lunsford, 1993).

### Factors that do not Influence the Propensity to Zap Commercials

Notably, the type of product being advertised and being outside of the product's target market do not affect commercial zapping (van Meurs, 1998). Moreover, the mix of commercials, programme promotions and station identification messages that make up the commercial pod does not appear to influence the propensity to switch channels (McDonald, 1996).

## Clutter

One of the factors identified in the literature as having a potential influence on commercial zapping is the 'perceived level of clutter'. This section details the key elements drawn from the television clutter literature, providing a more complete analysis of this important area of application.

### *Clutter Defined*

Clutter is the term used to describe the sum of non-programme components of broadcast materials (Brown & Rothchild, 1993; Webb & Ray, 1979). Clutter includes commercials, programme sponsorship credits, programme promotions and production or station identification (Jonas, 1996).

According to Ha (1996), clutter comprises three underlying components:

1. Quantity

   The number or weight of ads in relation to the media context.

2. Competitiveness

   The extent to which the ads are for the same product categories.

3. Intrusiveness

   The degree to which the ads disrupt the flow of the media environment.

### *Television Clutter*

Television is high on both search hindrance and disruption (Speck & Elliott, 1998) and is perceived to have the most advertising clutter in relation to other media forms. Moreover, television clutter has increased with television commercials now sandwiched by on-air promotions to a far greater extent (Meech, 1999).

The extent of television clutter varies widely among different countries. Whereas Chile has only 3.6 minutes per hour given to non-programme content, the Philippines has some 20 minutes per hour. Viewers in Japan or

the US are exposed to nearly 800 commercials per week compared to those in Chile or Germany who see only about 200 per week (Solomon, 1998).

### *Trends in the Levels of Television Clutter*

Within the television environment, the perception of clutter is affected not only by the number of commercial messages but also by the length of each commercial message (Jonas, 1996). The dramatic decline in the broadcast time of the standard television commercial over past decades has added considerably to the clutter problem. A standard television commercial in the US was 60 seconds during the 1960's. By the mid-1970's, it had reduced to 30 seconds and by the late 1980's, over one third of network commercials were only 15 seconds long (Kent, 1995; Ray & Webb, 1986).

The amount of time per hour given to advertising on television has risen steadily or even dramatically in some markets (Kent, 1993). In the US, five minutes per hour during prime time in the 1960's increased to over seven minutes per hour by 1992 (Kent, 1995). Between 1990 and 1994, European viewers were exposed to television clutter increases ranging between 48% for France and 263% for Germany (Jonas, 1996).

### *Perceived Clutter*

Clutter is a perceived construct and individuals vary considerably in how they define high versus low clutter levels (Ha, 1996; Speck & Elliott, 1998). Media users' perception of clutter may vary greatly from actual clutter levels. For example, only 8% of respondents think there is too much advertising in the yellow pages which has 100% actual clutter. On the other hand, 80% think there is too much advertising on television while there is mostly less than 25% actual clutter (Speck & Elliott, 1998).

It is likely that advertising is only perceived as clutter to the extent that it represents an unwanted signal. Since television advertising is considered

intrusive and disruptive, this is likely to increase the perception of clutter within this medium (Speck & Elliott, 1998).

### *Competitive Clutter*

Competitive clutter occurs when commercials for substitute products in the same physical form are aired close together (Kent, 1993). Zhao (1997) makes a distinction between competitive ads that are shown during the same commercial pod ("pod clutter") or during other pods within the same programme ("programme clutter").

Competitive clutter poses a problem for advertisers since this may lead to a reduction in brand name and claim recall for low-awareness brands (Kent, 1993). This is exacerbated by the higher levels of competitive clutter during the more expensive prime-time slots compared to cheaper daytime television viewing (Kent, 1995). However, there appears to be little effect of competitive clutter on claim recall for well-known brands (Kent & Allen, 1994) during any time slot.

### *The Effects of Increased Television Clutter*

Increased clutter may result in reduced advertising recall (Pillai, 1990; Webb & Ray, 1979) and an increase in advertising avoidance (Speck & Elliott, 1998) such as channel switching (Jonas, 1996; Ray & Webb, 1986; Speck & Elliott, 1998). Viewers appear to have a fixed memory capability which can store and recall between 4 and 5 commercials regardless of the level of advertising clutter (Webb & Ray, 1979). As clutter levels rise, viewers are still only able to retrieve their cognitive quota by ignoring the additional clutter. In selecting their preferred few messages, viewers tend to seek out high involvement commercials. These tend to be recalled despite higher levels of clutter (Webb, 1979; Webb & Ray, 1979).

A contrary view is presented by Brown and Rothschild (1993) who report that neither recall nor recognition of brands are adversely affected by increased clutter, particularly when clutter levels are already high.

***Who Responds to Higher Clutter Levels?***

Johnson and Cobb-Walgreen (1994) report that slow cognition viewers are most affected by clutter levels. Although fast cognition viewers show somewhat reduced recall for commercials in high clutter environments, those with moderate cognition respond equally well to both high and low clutter environments. Regardless of clutter levels, older viewers display lower recall and recognition scores than younger viewers (Johnson & Cobb-Walgreen, 1994). Moreover, whites, females and light viewers are more irritated by higher levels of television advertising clutter (Speck & Elliott, 1998).

## The Attitude towards Advertising

Another key factor that has been proposed as a potential influencer of channel switching behaviour is the viewer's 'attitude towards advertising'.
In particular, 'attitude towards television advertising' appears to be associated with channel switching behaviour (Lee & Lumpkin, 1992; Mittal, 1994; Speck & Elliott, 1997). The literature associated with attitudes towards advertising and television advertising is reviewed in this section.

### *Attitude towards Advertising in General*

'Attitude-towards-advertising-in-general' (AG) is widely regarded as the construct underlying the public's view of advertising across different media (Andrews, 1989; Andrews, Lysonski, & Durvasula, 1991; Mehta, 2000; Muehling, 1987). The extent to which this attitude is favourable or unfavourable carries important repercussions. A favourable attitude towards advertising offers both validation and encouragement for the efforts of the advertising industry. Moreover, a favourable assessment endorses advertising's pivotal role in the free-market environment. Therefore, the large number of studies that measure consumer attitudes towards advertising would appear to be warranted (Andrews et al., 1991; Bauer & Greyser, 1968; Bonnal, 1990; Haller, 1974; Mehta, 1998; Mittal, 1994; Sandage & Leckenby, 1980; Shavitt, Lowrey, & Haefner, 1998; Smit & Neijens, 2000; Zanot, 1981).

The measurement of attitudes towards advertising has gained momentum in recent years. There is ample evidence to indicate that favourable attitudes to advertising flow into more positive assessments of specific advertisements (Alwitt & Prabhaker, 1992; Bauer & Greyser, 1968; Mehta, 1998, 2000). Respondents who like advertising are more inclined to notice and recall more ads (Mehta, 1998) and express stronger buying interest (Mehta, 2000).

In addition, a clearer picture of the attitude-based segments that comprise media audiences has emerged, revealing both demographic (Alwitt & Prabhaker, 1992, 1994; Shavitt et al., 1998) and psychographic differences

(Brace & Bond, 1997; O'Donohoe & Tynan, 1998; Samuels & Silman, 1997; Smit & Neijens, 2000).

Although the attitude to advertising literature does reflect some consistencies across diverse studies, there are also disturbing variations that preclude consensus (Mittal, 1994; O'Donohoe, 1995; Shavitt et al., 1998). Differences in methodology may go some way to explain such variations. Non-probability samples such as those drawn from student-based or special interest populations are misleading (Reid & Soley, 1982; Soley & Reid, 1983b) and are without external validity (Shavitt et al., 1998). Both college students and consumer report subscribers were more negative towards advertising compared to a cross-sectional sample (Reid & Soley, 1982). In addition, the framing of questions is not consistently applied across all studies (Andrews, 1989; Sandage & Leckenby, 1980; Shavitt et al., 1998).

***The 'Attitude towards Advertising' Construct***

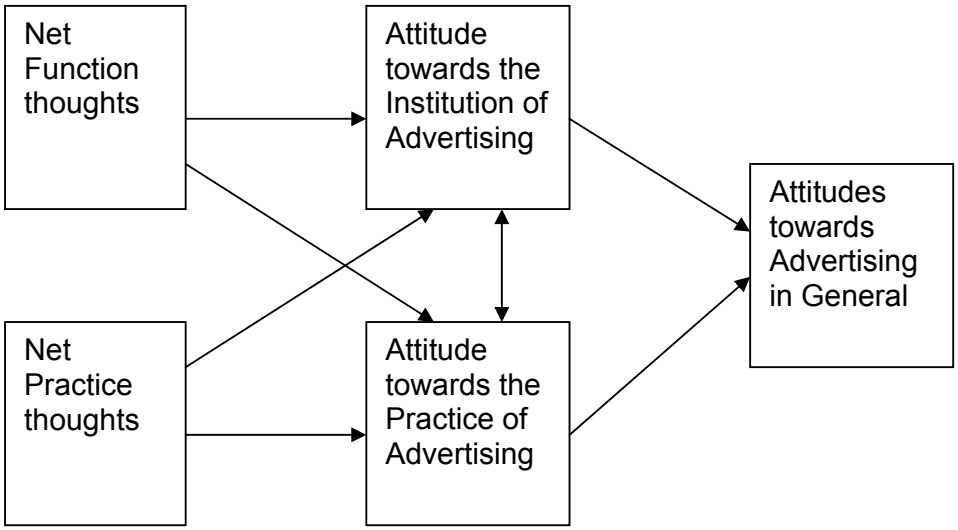
Lutz defines 'attitude towards advertising' as "a learned predisposition to respond in a consistently favourable or unfavourable manner to advertising in general" (Andrews et al., 1991).

The attitude towards advertising construct has come under considerable scrutiny (Andrews, 1989; Bauer & Greyser, 1968; Muehling, 1987; O'Donohoe, 1995; Pollay & Mittal, 1993; Sandage & Leckenby, 1980). There is evidence to indicate that attitudes to advertising are complex, multi-dimensional and ambivalent (O'Donohoe, 1995).

Firstly, It is important to make a distinction between advertising as an institution and advertising as an instrument (O'Donohoe, 1995; Sandage & Leckenby, 1980). As an institution, advertising is responsible for the provision of market information, helping society achieve material abundance and educating consumers. As an instrument, the focus is on the practice of advertising where the unit of analysis is the advertisement itself. Together attitudes towards the institution and practice of advertising account for 57% of

the variance in attitudes towards advertising (Muehling, 1987). Moreover, attitudes towards the institution of advertising are generally more favourable than attitudes towards the instrument of advertising (Muehling, 1987; Sandage & Leckenby, 1980). However, these two factors appear to cross over. For example, thoughts on advertising as a function impact on attitudes towards the practice of advertising. Equally, thoughts on the practice of advertising influence attitudes towards the institution of advertising (Durvasula, Andrews, Lysonski, & Netemeyer, 1993). A diagrammatic representation of this model is shown in Figure 2.1 and is taken from Durvasula et al. (1993).

**Figure 2.1 Model of Attitude towards Advertising in General**




Secondly, attitudes towards advertising differ based on their general versus personal impact (Reid & Soley, 1982). This is the tendency to rate 'myself' as less influenced by advertising than 'I rate others'. Pollay (1983) refers to this as the 'myth of personal immunity to advertising'. For example, respondents felt that advertising is 'more insulting to their intelligence than to other people's intelligence' and that it is 'more misleading and deceptive to other people than it is to them' (Reid & Soley, 1982).

***Attitude towards Advertising – How does it Measure?***

Attitude towards advertising studies began in the 1930's and until the 1950's reflected a consistently positive view of advertising (Zanot, 1981). Thereafter, the public opinion on advertising in general has grown increasingly negative (Mittal, 1994; Pollay & Mittal, 1993; Zanot, 1981). Although 80% of Americans expressed a favourable view of advertising during the 1940's, this plummeted to only 37% by 1974 (Mittal, 1994). However, in the UK, the fall in approval rates has been less profound, dropping from 84% in 1961 to 76% by 1992 (O'Donohoe, 1995). Notably, few studies have been conducted into this area since 2004 (Ashill & Ugur, 2005).

During the 1960's, attitude to advertising studies reveal that most Americans held favourable, mixed or indifferent attitudes to advertising as an institution (Bauer & Greyser, 1968; Brailsford, 1998). However, the social effects of advertising, targeted primarily at a minority of specific advertisements, came under some criticism (Andrews, 1989; Bauer & Greyser, 1968; O'Donohoe, 1995). During the 1970's and 1980's, negative attitudes towards advertising became increasingly apparent (Alwitt & Prabhaker, 1992; Anderson, Engledow, & Becker, 1978; Haller, 1974) particularly for television advertising (Alwitt & Prabhaker, 1994; Mittal, 1994; Smit & Neijens, 2000). In 1985, 53% of the viewers polled by Video Storyboard tests said they prefer television without commercials. Only four years later in 1989, 67% took this view (Gilmore & Secunda, 1993).

Negative attitudes to advertising were also reported among college students, including advertising and marketing students (Andrews, 1989; Haller, 1974; Sandage & Leckenby, 1980). Two-thirds of students indicate that advertising is not necessary (Haller, 1974) and the majority of students are highly critical of the social effects of advertising (Andrews, 1989; Reid & Soley, 1982; Sandage & Leckenby, 1980). Even among teenage and pre-teenage media consumers, negative predispositions towards advertising are evident (Boush, Friestad, & Rose, 1994; Chan & McNeal, 2004).

A contrary view is expressed by some authors (Gordon & Ryan, 1997; O'Donohoe, 1994; Shavitt et al., 1998). Some support the notion that advertising is generally appreciated, particularly advertising that seeks to involve the consumer (Gordon & Ryan, 1997). Based on a personal perspective, the majority of consumers (52%) indicate that they like to look at most advertising while only 25% report a negative attitude towards advertising in general (Shavitt et al., 1998). The latter study is both comprehensive and nationally representative. Although its findings contradict those of other national studies, this may be attributable to its personal framing - how advertising affects 'me' rather than how it affects 'us in general'. Apparently, consumers do display a more favourable personal attitude to advertising compared to their generalized perspective (Reid & Soley, 1982).

Advertising is positively rated for its information and content (O'Donohoe, 1994) but negatively rated for its potential to manipulate, intrude and deceive (Mehta, 1998). In this regard, the majority of US consumers (61%) agree that advertising is informative while 52% feel that they cannot trust advertising (Shavitt et al., 1998).

***Attitudes towards Advertising – An International Focus***

The construct 'attitude towards advertising' and its underlying influences 'attitude towards the institution of advertising' and 'attitude towards the practice of advertising' are both relevant and consistent cross-nationally. A study failed to reveal any cross national differences between New Zealand, Denmark, Greece, US and India (Durvasula et al., 1993).

By far the majority of attitude towards advertising studies are from the US (O'Donohoe, 1995). Few comparative studies between the US and other countries have been undertaken. However, in one such study, New Zealand, Danish and Greek student respondents were all significantly more critical of advertising in general than US students (Andrews et al., 1991).

Based on an examination of European attitudes, Britain, Norway, Finland and Germany have been generally favourable, while France and Denmark are more divided (O'Donohoe, 1995). Respondents in six European countries (France, Germany, Denmark, Spain, Italy and Britain) showed a steady appreciation of advertising with only 18% liking advertising less than before in a Young & Rubicam study. In the context of this study, British attitudes were most favourable with 84% claiming to like advertising (Bonnal, 1990). Based on an Advertising Association study, British approval for advertising has dropped off only modestly over three decades from 84% in 1961 to 76% in 1992 (O'Donohoe, 1995).

Across different media, television advertising is least liked. In the Netherlands, 62% are very negative about television advertising, 44.5% for radio, 16% for newspapers and 24.8% for magazines (Smit & Neijens, 2000). Within the television environment, no significant differences were reported in attitude towards advertising between groups of twelve and sixteen year olds in Japan and the US (Sherry, Greenberg, & Tokinoya, 1999).

***Factors Affecting Attitude towards Advertising***

The traditional economic and social belief dimensions proposed by Bauer and Greyser (1968) appear to be necessary (Andrews, 1989) but not sufficient indicators of the belief towards advertising in general (Pollay & Mittal, 1993).
As per capita advertising expenditure rises, advertising perceptions tend to shift from function-related such as social and economic influences to practice-related issues such as frequency of repetition and creative execution (Andrews et al., 1991).

Some key factors have emerged from recent studies. Alwitt and Prabhaker (1992) identify four functions of advertising – knowledge, hedonic, social learning and affirmation of value – that contribute 25% of the variability in liking of television advertising. Hedonic (entertainment) value is the strongest contributor. Pollay and Mittal (1993) explain 62.4% (collegians) and 55.9% (householders) of the variation in attitudes towards advertising via both

personal and societal factors. Personal factors include product information, social image and hedonic pleasure. Societal factors include effect on the economy, materialism, corruption of values and falsity/no sense.

Other factors that may negatively influence attitudes toward advertising are excessive advertising (Zhao, 1997), disruptive advertising (Alwitt & Prabhaker, 1992; Mord & Gilson, 1985; Speck & Elliott, 1998; Webb & Ray, 1979) and overly repetitive advertising (Bauer & Greyser, 1968). Shavitt et al. (1998) point to enjoyment, indignity, trustworthiness and usefulness as the key influencers affecting attitudes towards advertising. Being critical of advertising correlates positively with feelings of political and consumer alienation (Durand & Lambert, 1985).

Bauer and Greyser (1968) reported that non-whites in the US were more receptive to advertising while higher educated viewers were most critical. This view is supported by Shavitt et al. (1998) reporting that males, younger consumers (18-34), less educated, lower income and non-whites tend to reflect more favourable attitudes to advertising.

***Attitude towards Television Advertising – How does it Measure?***

Television viewers are discerning from a very young age. Advertising literacy is evident in viewers as young as seven years of age (O'Donohoe & Tynan, 1998). Negative attitudes towards television advertising, although unsophisticated, are reported by viewers as young as eleven years of age (Boush et al., 1994). Overall, US and Japanese adolescents report negative attitudes about the usefulness and believability of television advertising (Sherry et al., 1999). With its high visibility and intrusive nature, television advertising is generally disliked by adult viewers (Mittal, 1994) and is rated as being 'boring' and 'bad' in an extensive US study (Alwitt & Prabhaker, 1994). A majority of respondents perceive that television advertising aids materialism, promotes contentious values, contains too much sex and manipulates children (Mittal, 1994).

In relation to other media forms, television advertising rates highly in terms of deception and irritation (Haller, 1974; Mittal, 1994; Smit & Neijens, 2000; Speck & Elliott, 1998). Moreover, newspaper and magazine advertising is considered to be more informative and less irritating than television advertising (Bauer & Greyser, 1968; Mittal, 1994; Smit & Neijens, 2000). Television advertising is generally less liked compared to radio, magazines or newspapers (Smit & Neijens, 2000) and this is most commonly attributed to it being perceived as less informative (Bauer & Greyser, 1968; Soley & Reid, 1983). Heavy television commercial avoiders are more negative towards advertising compared to light and moderate avoiders in terms of advertising's usefulness and information content (Lee & Lumpkin, 1992).

On the positive side, the large majority (72%) of respondents recognized that television advertising supports television programming (Mittal, 1994).

***Factors Affecting Attitude towards Television Advertising***

Demographic differences appear to have limited impact in determining attitudes to television advertising (Bauer & Greyser, 1968; Haller, 1974; James & Kover, 1992; O'Donohoe, 1995). Older, high income viewers and those with fewer television sets are less likely to like television advertising (Alwitt & Prabhaker, 1992). However, these patterns are weak at best. Middle income viewers are more satisfied with the informational value of television advertising than both low and high-income groups as are blacks more satisfied than whites (Soley & Reid, 1983). A more recent study reveals that only older viewers tend to dislike television advertising significantly more (Alwitt & Prabhaker, 1994). Moreover, within similar demographic groups, consumers have different reasons for their dislike of television advertising (Alwitt & Prabhaker, 1994).

In terms of the extent to which television advertising is considered to be 'irritating', white collar, higher income, light viewers and college educated viewers rate highest. Notably, gender, age and the presence of children have no impact on irritation levels (Aaker & Bruzzone, 1985).

Cognitive differences appear to play a more significant role in the attitude towards television advertising. Television advertising is liked by viewers who believe it offers informational and entertainment benefits (Smit & Neijens, 2000) while it tends to be disliked by those who believe that TV advertising is offensive, not informative, shown too frequently or has negative content (Alwitt & Prabhaker, 1994). The degree of involvement with television commercials for which the viewer is a non-user lead to higher levels of viewer irritation (Aaker & Bruzzone, 1985).

The liking of television advertising is aligned with viewers perceiving that television advertising provides information and other benefits (Alwitt & Prabhaker, 1992; Bauer & Greyser, 1968) and is well created and executed (Alwitt & Prabhaker, 1992; Muehling, 1987). Furthermore, truth and relevance in television advertising are significant contributors to liking of television advertising (Alwitt & Prabhaker, 1992).

Although only a small minority of respondents (6.1%) selected the word 'irritating' to describe a cross-section of television commercials, some product classes attracted higher levels of irritated responses. Feminine hygiene, hemorrhoids/laxatives, women's underwear, mouthwash and anti-acids were considered to be most irritating (Aaker & Bruzzone, 1985).

***The "Irritation" Factor***

Liking of advertising in general does have a positive impact on advertising effectiveness. Advertising that is interesting performs better than advertising that irritates consumers. However, advertising that produces neither of these reactions is even less effective (Stapel, 1994). In the context of an individual advertisement, there may be other forces at play. For example, irritating television commercials were slightly more recognized than less irritating ads (Aaker & Bruzzone, 1985) and tend to result in higher levels of involvement in the advertising (James & Kover, 1992). It may be that irritation consists of two different forms – "I love to hate it" and "I hate to watch it". The former version

is likely to produce higher levels of recognition. However, advertising that is memorable through irritation may produce short term recall impact but the negative halo effect produced in the long term is likely to be damaging for the brand (Gordon & Ryan, 1997). In addition, an irritating commercial may cause negative feeling towards a subsequent unrelated and neutral commercial and even to an unrelated brand (Fennis & Bakker, 2001). This effect is magnified for those viewers who demonstrate a high need to evaluate television advertising.

A common reason for irritation is frequent repetition of a commercial (Mittal, 1994). However, Mittal (1994) reports that 51% of respondents agreed that they don't mind the repetition if the commercial is interesting.

***Television Advertising Rejecters***

Although early studies of advertising attitudes evoked predominantly mixed or negative responses, very few held strong negative feelings towards advertising (Bauer & Greyser, 1968; Brailsford, 1998). More recent studies, however, have detected a cluster of viewers who are extremely negative towards television advertising (Alwitt & Prabhaker, 1992; Brace & Bond, 1997; Samuels & Silman, 1997; Smit & Neijens, 2000).

There is no consensus as to the size of this group labeled "TV rejecters". Lower estimates refer to 20% of the television viewing audience (Samuels & Silman, 1997) with upper estimates as high as 49% (Smit & Neijens, 2000). They have a slight bias towards older, AB income and lighter viewers but are found across all demographic groups (Samuels & Silman, 1997).

TV Rejecters are less likely to accurately recall advertising (Samuels & Silman, 1997) despite that they are exposed to the same volume of television as 'TV Acceptors' (Brace & Bond, 1997). Paradoxically they may be more responsive to advertising than those with positive attitudes towards advertising. Acceptors are more attentive to advertising, but appear to lose interest faster than Rejecters (Brace & Bond, 1997).

### *Attitude to Advertising and Zapping Behaviour*

The relationship between attitude to advertising and zapping behaviour requires further investigation. There are some associations that indicate a link between channel switching and attitude towards television or TV programmes. Perse (1990) reports that ritualistic viewing motives, along with negative attitudes towards television are linked to higher levels of channel switching (Kaye, 1994, p.57). There is a direct relationship between liking a programme and liking (Alwitt & Prabhaker, 1992) or recalling (Galpin & Gullen, 2000) the associated advertising.

However, being positively disposed towards television in general does not appear to decrease commercial avoidance behaviour (Wenner & O'Reilly Dennehy, 1993). It is not clear whether one's liking for television advertising will influence one's level of channel switching activity.

### Summary of Key 'Attitude towards Advertising' Literature

Table 2.2 contains a summary of the key studies in the 'attitude towards advertising' area. The study summaries are date-ordered spanning a period of thirty years starting in 1968 (Bauer & Greyser, 1968) until 1998 (Shavitt et al., 1998). A total of eleven studies are summarized and compared on the basis of sample size, respondent group, method of data collection, external validity, focus on institution versus instrument, personal versus general focus, country of origin and summary of findings.

## Table 2.2 Summary of key 'Attitude towards Advertising' literature

| Year J'nl | Author | Purpose | Media | Sample size | Respondents and response rate | Data collection | External validity | Focus – institution or instrument | Personal versus General | Country | Findings |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1998 JAR | Shavitt et al | General public's level of personal confidence in advertising<br>Enjoyable<br>Useful<br>Reliable<br>Lives up to claims | All media | Over 1000 | Nationally representative adults | CATI | Representative of US population | Both with a instrument bias | Personal | US | 51.7% tend to enjoy advertising<br>61% generally perceived as informative<br>68% useful to guide decisions<br>68% sometimes or often misled by adv<br>Males, young, less education and income, non-whites enjoy it more |
| 1994 JAR | Alwitt and Prabhaker | Profile of those who dislike TV advertising | TV | 1000 | Consumer panel<br>79% | Mail | Representative of US population but tend to be younger, more highly educated | Both | General | US | Tend to dislike TV advertising in general<br>Older people tend to dislike TV advertising more<br>Income alone is a poor predictor<br>TV advertising is disliked when it is seen to be offensive, not informative, too frequent or viewers are negative about its content |
| 1994 JAR | Mittal | Attitude to advertising | TV | 200 | Consumer panel<br>67% | Mail | Skew to higher education | Both | General | US | 48% dislike adv<br>Aids materialism and too much sex<br>Manipulates children<br>Repetition |
| 1993 | Pollay and Mittal | A model for beliefs and attitudes about advertising | All Media | Students 188<br><br>Head of h/hold 300 | General studies undergraduates 100%<br><br>Households 65% | Self complete<br><br>Mail | Single Ohio University<br><br>Randomly selected from a panel | Both | Personal and General | US | The B/G model is inadequate<br>Social and economic factors are separate dimensions<br>Model explains 55% (collegians) and 60.4% (households) of the variance within the data<br>The most important predictor of global attitudes of student is 'good for the economy' while for householders it was 'falsity' and 'no sense'<br>Collegians are similar to B/G profile, but householders are more negative towards advertising |

**Table 2.2 Summary of key 'Attitude towards Advertising' literature (continued)**

| Year J'nl | Author | Purpose | Media | Sample size | Respondents and response rate | Data collection | External validity | Focus – institution or instrument | Personal versus General | Country | Findings |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1992 IJA | Lee and Lumpkin | Do VCR owners and non-owners have different attitudes to advertising?<br>Do TVC avoiders and non-avoiders differ in their attitude towards advertising? | TV | 400 | Random selection from city telephone directory<br>23.3% | Self completion | Representative of a south eastern US city other than being older and have fewer black respondents | Both | Mixture | US | VCR owners and non-owners do not differ in their attitude towards advertising<br>In general, heavy TVC avoiders have a more negative attitude towards TV advertising than light and moderate avoiders. They rate TVC's as less informative and less useful than light and moderate avoiders. They also rate advertising as 'leading to wasteful buying' significantly higher than moderate and light avoiders |
| 1992 JAR | Alwitt and Prabhaker | Reasons for overall attitudes about TV advertising | TV | 1200 | Random selected Chicago phone book listings<br>19% | Mail | Skew to older, wealthier and fewer children | Both | General | US | Respondents are negative about TV advertising (similar to Bauer and Greyser, 1968 study)<br>Those with higher income, older and fewer TV sets like TV advertising less<br>More perceived clutter, the less TV advertising is liked<br>Regardless of demographics, liking programmes is linked to liking TV advertising |
| 1989 JA | Andrews | Examines belief statements towards economic and social effects of advertising | All media | 1562 | Undergraduate marketing students Convenience sample<br>100% | Self completion | None | Institution | General | US | Confirms Bauer and Greyser's social and economic dimensions inherent in Attitude to Advertising<br>Strong agreement that advertising is essential<br>A greater % feel that adv insults one's intelligence; persuades to buy things you shouldn't; does not lead to lower prices; does not present a true picture of advertised products |
| 1982 | Reid and Soley | Generalized versus personalized attitudes to advertising | All | 260 | Cross section of a selected community<br>81% | Phone | Representative of local community | Both | General and Personal | US | Personal views of advertising are more favourable than generalized views<br>Cross-section samples offer a more favourable view of advertising than student and limited populations |

**Table 2.2 Summary of key 'Attitude towards Advertising' literature (continued)**

| Year J'nl | Author | Purpose | Media | Sample size | Respondents and response rate | Data collection | External validity | Focus – institution or instrument | Personal versus General | Country | Findings |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1980 | Sandage and Leckenby | Student attitudes towards the institution versus the instrument of advertising | All media | 1552 | Undergraduate advertising students Longitudinal study 1960 – 1978 (and some high school students) | Self completion | None | Both | General | US | Students have a more favourable attitude towards the institution than the instrument of advertising |
| 1974 JAR | Haller | What students think of advertising | All media | 500 | College students from randomly selected colleges | Personal interview | Extends only to colleges | Institution | General | US | Results differ markedly from a Greyser and Reece study of business people<br>Only one third felt that advertising is necessary at all<br>The majority rated advertising as misleading, insulting intelligence and irritating<br>80% rated TV as high or very high for 'annoying' and 75% rate it as high or very high for 'offensive'<br>Magazine and newspaper ads are rated less negatively than radio and television |
| 1968 | Bauer and Greyser | Views on advertising and scaled beliefs of its social and economic role | All media | 1846 | National probability sample | In-home personal interviews | Representative of US population | Both | General | US | Most Americans held favourable 40%), mixed or indifferent attitudes to adv as an institution<br>A significant number were annoyed or offended by a minority of specific ads<br>Attitudes towards advertising are not significantly influenced by education, gender or age<br>American consumer respect the economic role of advertising but criticize its social effects |

## Research Gaps in the Literature

In this section of the work, the literature is scrutinized in order to determine what gaps exist for further study. Three broad areas for further study and refinement emerge. These are the extent of channel switching behaviour, situational factors influencing channel switching behaviour as well as further evaluation of the predictors of channel switching.

### *The Extent of Channel Switching*

As indicated in the literature review, there are significant variations in television audience's avoidance behaviour. Some studies report on the percentage of audience that zap commercials. Such studies report a variety of findings including 16% (Greene, 1988; Kaatz, 1986), between 50% and 67% (Heeter & Greenberg, 1985), 67% (Mittal, 1994) and 81% (Tse & Lee, 2001). Studies that measure the percentage of commercial time that is avoided also report a variety of results including 3.4% (Siddarth & Chattopadhyay, 1998), 5% (Zufryden et al., 1993), 10.4% (Danaher, 1995), 28.6% (van Meurs, 1998) between 45% and 60% (Abernethy, 1991), and 61% (Moriarty & Everett, 1994).

Clearly the range of results indicates that the extent of channel switching behaviour should be retested within the context of a large-sample, real-life study. The observation/survey approach provides the methodological leap necessary to resolve the question of how much channel switching takes place as well as to draw direct comparison between reported and observed levels of channel switching within the same study. This dual methodological approach offers a potent mix of research approaches to extend knowledge in the area of television advertising avoidance and channel switching. This method is fully explained and discussed in Chapter 5.

### *Situational factors Influencing Channel Switching Behaviour*

Speck and Elliot (1997) make mention of the need to evolve our understanding of 'situational factors' in relation to advertising avoidance. In the context of this study, situational factors refer to the triggers that may provide the stimulus for zapping a commercial. This includes factors such as the viewer's mood, a disliked commercial, pressure from other viewers and so on. There are notably very few studies that draw attention to the influence of situational factors on channel switching behaviour. One example quoted in the literature is Siddarth and Chattopadhyay (1998) who report that previously unseen commercials enjoy a lower incidence of zapping relative to 'already seen' commercials and fully exposed ads.

Based on the dearth of research data in this area, there is clearly scope to develop a scale to capture the primary situational factors that influence channel switching. This segment of work in itself offers a significant contribution to new knowledge. It not only identifies those scale items that trigger channel switching but also provides the impetus to extract factors from the item list for inclusion into the study as potential predictors of channel switching. The development of the scale to measure situational triggers underlying channel switching (SITUZAP) is fully explored in Chapter 3.

### *The Predictors of Channel Switching Behaviour*

There are a number of studies that have identified research opportunities for further investigating the predictors of channel switching behaviour. In particular, researchers have called for further insight into the relationship between channel switching and levels of clutter (Ha & Litman, 1997; Webb & Ray, 1979), channel proliferation (Cronin, 1995; Danaher, 1995; Ferguson, 1992; Heeter & Greenberg, 1985; Kaatz, 1986), attitudes towards advertising (Dix & Phau, 2003; Speck & Elliott, 1997), and planned versus impulse viewing (Heeter & Greenberg, 1985; Speck & Elliott, 1997).

A number of studies have suggested that the genre of the programme being watched may influence the extent of channel switching (Danaher, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1998; Tse & Lee, 2001). Current research indicates that channel switching does appear to vary across different genres. For example, certain programme genres such as soaps and game shows appear to retain their audiences during advertising breaks (Danaher, 1995) whereas male dominated programmes such as sports programmes are highly prone to grazing, particularly for slower moving sports such as baseball (S. T. Eastman & Neal-Lunsford, 1993).

There are significant academic and industry benefits from testing the relative influence of these potential predictors on channel switching behaviour in a large-sample, real-life study. Such a study will clarify and extend our knowledge of the channel-switching environment. Moreover, the proposed observation/survey methodology will enrich the quality of the study and expand on the number and variety of potential predictors of channel switching for testing.

## Research Objectives for this Study

A number of research questions and objectives emerge from the gaps in the literature. Table 2.3 sets out the research questions posed in this study as well as the corresponding research objectives.

**Table 2.3 Research Questions and Objectives associated with this Study**

| Research Questions | Research Objectives |
|---|---|
| What percentage of advertising time is missed as a result of channel switching? | Establish the extent of channel switching during prime time television viewing among the target sample group. |
| What situational triggers/factors in the context of television viewing contribute to the viewer switching channels? | Develop a scale to identify the situational factors that trigger impulse channel switching during television advertising breaks. |
| What influence do potential predictors identified in the literature have on channel switching? | Determine the relative influence of identified predictors on channel switching during live prime-time television commercial breaks. |
| Does channel switching during advertising breaks vary across age/gender and for different programme genres? | Compare the extent of channel switching during commercial breaks across age, gender and selected television genres. |

## Summary

This chapter investigates the literature that is directly and indirectly associated with television advertising avoidance and channel switching. The literature in the area of commercial zapping or channel switching has been both scrutinized and synthesized. The potential predictors of channel switching behaviour are identified and fully discussed based on the literature. Several key potential predictors emerge, including Perceived Clutter, Channel Proliferation, Attitude towards Advertising, Planned versus Impulse Viewing and Situational Triggers. Gaps in the literature are identified and motivated in terms of the existing literature. From these gaps, the research objectives and hypotheses emerge and are addressed in chapter 3 and 4. Chapter 3 is

concerned with the development of a scale to measure the situational factors that trigger channel switching. In chapter 4, the theoretical underpinnings of the study are examined. Theories including reactance theory, social exchange theory and selective exposure theory provide a foundation for the hypotheses that define the study.

# CHAPTER THREE: DEVELOPMENT OF THE 'SITUZAP' SCALE

## Overview

This chapter identifies the situational triggers that may prompt a viewer to switch channels during television advertising breaks. Items drawn from the literature as well as from a group discussion are synthesized to comprise a scale (SITUZAP) used to measure the situational triggers underlying channel switching. This chapter follows the scale development process per authoritative sources (Churchill, 1979; Churchill & Iacobucci, 2002; DeVellis, 2003; J. K. Eastman, Goldsmith, & Flynn, 1999) and follows a series of steps to develop and refine the SITUZAP scale. Initially, the domain of the construct is specified. Thereafter, a sample pool of items is generated, followed by data collection and purification of the scale. Fourteen scale items are derived. These reduce to eleven items, which converge onto two orthogonal factors – Advertising Triggers and RCD Empowerment. Finally, the reliability and validity of the scale is assessed, confirming the usefulness of the scale and its underlying dimensions for inclusion into the study.

## Introduction

Although channel switching is particularly heavy after the first five to ten seconds of commercial breaks (Abernethy, 1991; Nakra, 1991), results from studies to date clearly indicate that commercial zapping takes place throughout the advertising break (Cronin, 1995; Danaher, 1995; Dix & Phau, 2003). These patterns suggest that, although commercial zapping is partly a learned pattern of response to advertising in general (Heeter & Greenberg, 1985; Speck & Elliott, 1997), there is also a component of switching that takes place in response to situational factors (Cronin, 1995).

Following the review of literature, it is clear that no tools have been developed to measure the effect of situational factors on channel switching. Although proven scales have been developed for 'perceived clutter' and 'attitudes

towards advertising' (Speck & Elliott, 1997), no recognized measure exists for the situational factors that trigger channel switching.

## Developing a Scale to Measure the Situational Triggers for Channel Switching (SITUZAP)

In order to advance the quality of work in the area of channel switching, a scale to measure the situational factors that trigger channel switching during advertising breaks is necessary (Elpers et al., 2003; Siddarth & Chattopadhyay, 1998; Speck & Elliott, 1998). Speck and Elliot (1998) urge researchers to advance the study of advertising avoidance to include 'situational factors related to media use'. In this chapter, the intention is to develop a scale to measure those situational factors that trigger channel switching specifically within the television environment. The paradigm underlying the development of the scale is based on the process provided by established texts and relevant journal papers providing specialist guidance on this topic (Churchill, 1979; Churchill & Iacobucci, 2002; DeVellis, 2003; J. K. Eastman et al., 1999; Li, Edwards, & Lee, 2002). The process consists of two studies (a pilot study and a main study) designed to generate scale items to measure situational factors that trigger channel switching during ad breaks. Moreover, the process purifies the scale and demonstrates its reliability and validity as an instrument of measurement. The process is set out over a number of steps as follows:

1. Specify the Domain of the Construct
2. Generate an Item Pool
3. Initial Data Collection
4. Purify the Measure
5. Additional Data Collection
6. Assess the Reliability of the Scale
7. Assess the Validity of the Scale

### *Step 1: Specify the Domain of the Construct*

Selected studies in the literature allude to the influence of situational factors on channel switching (Bryant & Rockwell, 1993; Elpers et al., 2003; Olney et al., 1991; Siddarth & Chattopadhyay, 1998; van Meurs, 1998). The first step in scale development is to generate a definition for the domain of the construct (J. K. Eastman et al., 1999). For purposes of this study, situational factors are defined as those factors that trigger impulse channel switching during advertising breaks as a viewer's response to his or her viewing environment. This comprises a potentially broad range of factors including the viewer's response to a disliked, irritating or repeated commercial, access to the remote control device, pressure from fellow-viewers to switch channels and so on. This scale developed to measure situational factors influencing commercial zapping will be referred to as the "SITUZAP" scale.

In order to retain consistency with existing scale formats in the area of advertising avoidance studies (Speck & Elliott, 1997, 1998), the measurement format selected for the SITUZAP scale is the '7-point Bipolar Scale'. Bipolar descriptions supporting the scale are 'Never' and 'Always' with a score of '1' corresponding to 'Never" and a score of '7' corresponding to 'Always'. For example, "I switch if an irritating ad comes on" can be rated on any one of seven points. A rating of '1' indicates that the respondent never switches when an irritating ad comes on while a rating of '7' indicates that the respondent always switches when an irritating ad comes on. A rating of '4' provides a neutral midpoint for the scale. The 7-point scale provides adequate rating options for respondents to discriminate their response selections and to generate sufficient variability within the measure (DeVellis, 2003).

### *Step 2: Generate an Item Pool*

The second step is to use the definition of the domain to generate an item pool (J. K. Eastman et al., 1999). Scale items were initially drawn from the literature as well as from a group discussion (Appendix 1). Per the literature,

impulse channel switching can occur based on a number of triggers or stimuli, including 'to see what's on TV' (Heeter & Greenberg, 1985; van Meurs, 1998; Walker et al., 1993c), 'to sample other programmes' (Kaatz, 1986), 'to annoy others' (Heeter et al., 1993), to 'control family viewing' (Bellamy & Walker, 1996, p3), 'variety seeking', 'multiple show watching' (Heeter & Greenberg, 1985) and 'accessing music videos or news' (Walker et al., 1993c).

The group discussion was conducted to generate an item pool of situational triggers associated with commercial zapping. In defining the objective of the focus group for participants, care was taken to fully explain the meaning of 'situational factors' that may trigger channel switching. Thereafter, participants were required to list those situational factors that may lead to their own channel switching during advertising breaks. A discussion ensued for which the transcript is included in Appendix 1.

Situational factors extracted from the group discussion confirmed and augmented those factors presented in the literature. In all, fourteen scale items were extracted from the group discussion. Table 3.1 outlines excerpts from the discussion with corresponding question items generated for inclusion into the scale.

**Table 3.1 Discussion Group Output and Corresponding Scale Items**

| Group Discussion Output | Scale Item |
|---|---|
| "Ads that people sing in – you know that ad about the Sultana Bran, you know when they sing, they sing about the cereal and that annoys me. I have to switch"<br><br>"Yeah, like the one's where they try to make the ads into a movie, like that 'it's a drama', RAC. It is overplayed and irritating" | I switch if an irritating ad comes on |
| "Sometimes they start with the ad and then before they come back, they play a shorter version. They start with the shorter version and then just before your programme comes on you have to sit through a long version. And you've just watched that ad. That's annoying"<br><br>"Too constant, too repetitive" | I switch if an ad comes on that has been repeated too often |
| "I find that with sports matches like soccer or cricket matches. You know how they have an ad break after every over – regardless. You might even see the same ad in one ad break" | I switch if an ad comes on that I have seen very recently |
| "Yes, sometimes an ad might catch your attention first time but for some reason they may overplay it. Even though I liked it first time but it becomes irritating and then you start to dislike it" | I switch if I dislike the commercial |
| "I think ad breaks …well there's too many of them"<br><br>"Yes, there are lots of ads on Australian television" | I switch because there are too many ads on television these days |
| "I am always looking to see what else is on and then I get very annoyed if there are ads on the other channels"<br><br>"I change to music max cause there is always something on that you know is going to be music rather than watching an ad" | I switch to see what else is on other channels |
| "It also just becomes habit, for no reason, it just becomes a natural habit that you will change during the ad breaks" | I switch out of habit |

**Table 3.1 Discussion Group Output and Corresponding Scale Items (cont)**

| Group Discussion Output | Scale Item |
|---|---|
| "I just want to sit down and watch a movie for two hours and don't want to be distracted"<br><br>"You'll always find something on cable – 24/7 news or sport. So rather than watching an ad, I'll personally go to the news headlines or sport" | I switch because the ads disrupt the programme that I am watching |
| "I try to watch more than one programme at once"<br><br>"It gives you the opportunity to watch another show at the same time"<br><br>"I try to watch more than one programme at once" | I switch so that I can watch two programmes at the same time |
| "If you are really comfortable and you left the remote on top of the television, you're not going to get up and get it"<br><br>"We used to have an old telly where we diddn't have a remote control. During the adverts no one would bother to get up to switch the channel – too lazy. Now, we've got the remote, Charlie, he flips all the time"<br><br>"Whoever shouts loudest, whoever has got the remote" | I switch when I have the remote control within my reach |
| "Some ads are quite annoying and have nothing to do with me – that's when I change channels" | I switch when a product is advertised that has nothing to do with me |
| "Living in a house with different people, there is peer pressure to switch and since there are seven of us, the television is switched a lot during the ads" | I switch when asked to by others watching with me |
| "Sometimes you're watching TV just for entertainment, you're not watching a specific thing. So when adverts come on, there's a constant need to be entertained – so I switch the channel" | I switch out of boredom |
| "I may switch to get a cricket score or a footy score or something" | I switch to check a sport score on another channel |

In summary, the fourteen items included into the SITUZAP scale based on the qualitative output per Table 3.1 are as follows:

1. I switch if an irritating ad comes on
2. I switch if an ad comes on that has been repeated too often
3. I switch if an ad comes on that I have seen very recently
4. I switch if I dislike the commercial
5. I switch because there are too many ads on television these days
6. I switch to see what else is on other channels
7. I switch out of habit
8. I switch because the ad disrupts the programme that I am watching
9. I switch so that I can watch two programmes at a time
10. I switch when I have the remote control within my reach
11. I switch when a product is advertised that has nothing to do with me
12. I switch when asked to by others watching with me
13. I switch out of boredom
14. I switch to check a sport score on another channel

*Have the Initial Item Pool Reviewed by Experts*

A panel of industry specialists and a panel of academics researching in this area verified the proposed scale items. The industry group comprises senior people drawn from the Perth advertising and television industries, including a media planner, an advertising executive and a media consultant. The Media Planner is from MarketForce, the largest advertising agency in WA. The advertising executive is a senior agency person with Gatecrasher Advertising agency while the media consultant is the founder of Ergo Media and has media experience in both Perth and Sydney with a career spanning over fifteen years. The academic panel comprises three Perth-based academics specializing in the advertising and media area". Cumulatively, the academic panel has over thirty years of academic experience in the area of marketing and advertising. Two of these are ex-practitioners with a total of twenty two years experience in industry and continue to provide consulting services to marketing and advertising clients within Western Australia.

The list of items was deemed to provide a relevant and comprehensive list of situational triggers for channel switching among television viewers. However, it is noted that the item pool is not necessarily exhaustive. There are other situational factors that may potentially trigger channel switching such as viewer tiredness, time of day or turning up the sound during ad breaks. However, there is arguably a limitless number of potential situational triggers. Thus the item pool is restricted to those factors that are considered to be most influential within the viewing environment.

***Steps 3, 4, and 5: Data Collection and Scale Purification***

Data were initially collected via two pilot studies followed by a main study. Factor analysis was conducted to purify scale items by eliminating those items that do not belong to any particular cluster of items. (Churchill & Iacobucci, 2002, p.816). Based on an exploratory factor analysis during the pilot study phase (n = 187), a three-factor solution emerged (Appendix 2). However, only two scale items load onto factor 3, one of which (switch boredom) loads onto all three factors. This scale item along with 'Switch – asked by others' were eliminated from the scale, removing factor three from the analysis owing to it's single-item status. A third item, 'Switch – sports score' was excluded from factor one since its correlation coefficient fell below 0.512 (Field, 2005, p.637) which is the threshold for a significant loading for a sample size of 100.
Despite that the sample size exceeded 100, it was decided to take a conservative view and exclude the item from the scale.

Churchill (1979) notes that the next stage in scale purification is to examine the dimensionality of the scale items. The remaining eleven scale items were analysed to reveal a two-factor structure (Appendix 3) with eigenvalues of 4.58 and 1.37 exceeding Kaiser's criterion for eiganvalues greater than 1 (DeVellis, 2003; Field, 2005, p.633). The two-factor solution is clearly supported by the accompanying scree plot per Appendix 3 (DeVellis, 2003, p.114). The two factors account for 41.6 percent and 12.5 percent of the total

variance. Once the scale items are agreed, factors are named in terms of the underlying items inherent in that factor (Churchill & Iacobucci, 2002, p.816).

*Factor 1 – Advertising Triggers*

Factor 1 is labeled "Advertising Triggers". This factor captures channel switching behaviour resulting from impulse reactions to an advertising related stimulus – the ad is repeated, disliked, irritating, too recent, irrelevant. These stimuli are triggered by the advertising itself rather than by extraneous factors such as the viewer's mood or arousal states (Bryant & Rockwell, 1993, p74), number of people in the room or the number of functional RCDs.

*Factor 2 – RCD Empowerment*

Factor 2 is labeled 'RCD Empowerment'. This factor encapsulates the notion that viewers switch channels because they can. Viewers use the RCD to maximize their viewing experience by reducing exposure to non-programme material. In essence, the remote control empowers the viewer to take control of his or her viewing environment. The viewer accesses the RCD to watch two programmes simultaneously, limit commercial disruptions, see what else is on and avoid advertising clutter. There is evidence in the literature supporting that access to a remote control device is a strong predictor of zapping behaviour (Abernethy, 1991; Heeter & Greenberg, 1985; McDonald, 1996; Zufryden et al., 1993). Danaher (1995) notes that access to a VCR/remote control device is the most important predictor of household zapping behaviour.

**Table 3.2 Factor Loadings and Key Summary Data for the SITUZAP Scale per the Pilot Study**

| **Scale Item**<br><br>**I switch….** | **Factor One Advertising Triggers** | **Factor Two RCD Empowerment** |
|---|---|---|
| An ad comes on that is repeated too often | 0.820 | |
| I dislike the commercial | 0.758 | |
| If an ad comes on that I have seen recently | 0.745 | |
| When an irritating ad comes on | 0.684 | |
| The advertised product has nothing to do with me | 0.629 | |
| I have the remote within my reach | | 0.725 |
| The ads disrupt the programme I am watching | | 0.695 |
| Out of habit | | 0.690 |
| So I can see what else is on other channels | | 0.686 |
| So I can watch two programmes at the same time | | 0.654 |
| There are too many ads on TV these days | 0.335 | 0.580 |
| Eigenvalue | 4.581 | 1.373 |
| Variance Explained | 41.65% | 12.48% |
| Alpha Co-efficient | 0.816 | 0.793 |

The reliability index (Cronbach's alpha co-efficient) indicates the proportion of variance in the scale scores that is attributable to the true score (DeVellis, 2003, p.95). The alpha co-efficients for 'Advertising Triggers' and 'RCD Empowerment' are 0.816 and 0.793 respectively. These scores highlight the reliability of the scale since values between 0.8 and 0.9 are considered to be 'very good' (DeVellis, 2003, p.96). Moreover, there is no improvement in these indexes if any of the scale items are eliminated (Appendix 4).

*Retesting the Scale in the Main Study*

The scale was retested during the main study (n = 848). All eleven scale-items representing the triggers for channel switching registered average ratings above 3 on a 7-point rating scale (where 1 = never and 7 = always).

**Table 3.3 Scale Item Mean Ratings and Standard Deviations**

| Reason for Switching | Mean | Std Dev |
|---|---|---|
| I switch to see what else is on other channels | 5.44 | 1.425 |
| I switch if an irritating ad comes on | 5.19 | 1.699 |
| I switch if I dislike the commercial | 5.08 | 1.735 |
| I switch if an ad comes on that has been repeated too often | 4.93 | 1.682 |
| I switch because there are too many ads on TV these days | 4.52 | 1.645 |
| I switch when I have the remote within my reach | 4.37 | 1.708 |
| I switch if an ad comes on that I have seen very recently | 4.20 | 1.594 |
| I switch because the ad disrupts the programme I'm watching | 3.96 | 1.722 |
| I switch out of habit | 3.85 | 1.704 |
| I switch when the product has nothing to do with me | 3.82 | 1.763 |
| I switch so that I can watch two programmes at the same time | 3.81 | 1.803 |

Inspecting means and variances is a useful double-check to gauge the potential value of the items to the scale (DeVellis, 2003, p.94). In this regard, a number of observations emerge from Table 3.3 that support the performance of the scale items. Firstly, the item means are close to the center of the range of possible scores, being '4' on a 7-point scale. This is an ideal outcome since over a number of respondents, the average should gravitate to the centre of the scale rather than pile up against either extreme (DeVellis, 2003, p.94). Secondly, the relatively high scale item variances indicate a healthy range of scores across each item (DeVellis, 2003, p.93).

Factor analysis was conducted on the 11-item survey scale (Appendix 3). Strong confirmation for the refined pilot scale emerged as the items converged into two factors, almost identical to the pilot result (Table 3.2).
In the pilot study, 'too many ads' loads onto both Advertising Triggers (0.335) and RCD empowerment (r = 0.58) and was included in factor 2 (RCD Empowerment). However, in the main study, this item loads more strongly (r = 0.638) onto factor 1 (Advertising Triggers).

This change does not undermine the integrity of the underlying factor. 'Too many ads' is arguably a better fit for 'Advertising Triggers' as clutter is an advertising-related stimulus for channel switching, along with other triggers such as repetition, dislike and irritation.

It is stated in a previous section that the second factor, 'RCD Empowerment', is embedded in the notion that viewers switch channels because they can. Viewers use the RCD to maximize their viewing experience by reducing exposure to non-programme material. In essence, the remote control empowers the viewer to take control of his or her viewing environment. Again, the same scale items load onto this factor except for one. The item, 'product has nothing to do with me' now loads onto factor 2 (r = 0.517). This change does not undermine the integrity of the underlying factor as the item aligns with screening out any material that is not relevant to the viewer.

Per Table 3.4, Factor 1 (Advertising Triggers) accounts for 48.53 percent and Factor 2 (RCD Empowerment) accounts for 11.82 percent of the total variation in the 11 scale items. Together, these factors account for a total of 60.35 percent of the variation in SITUZAP.

**Table 3.4 Factor Loadings and Key Summary Data for SITUZAP Scale per the Main Study**

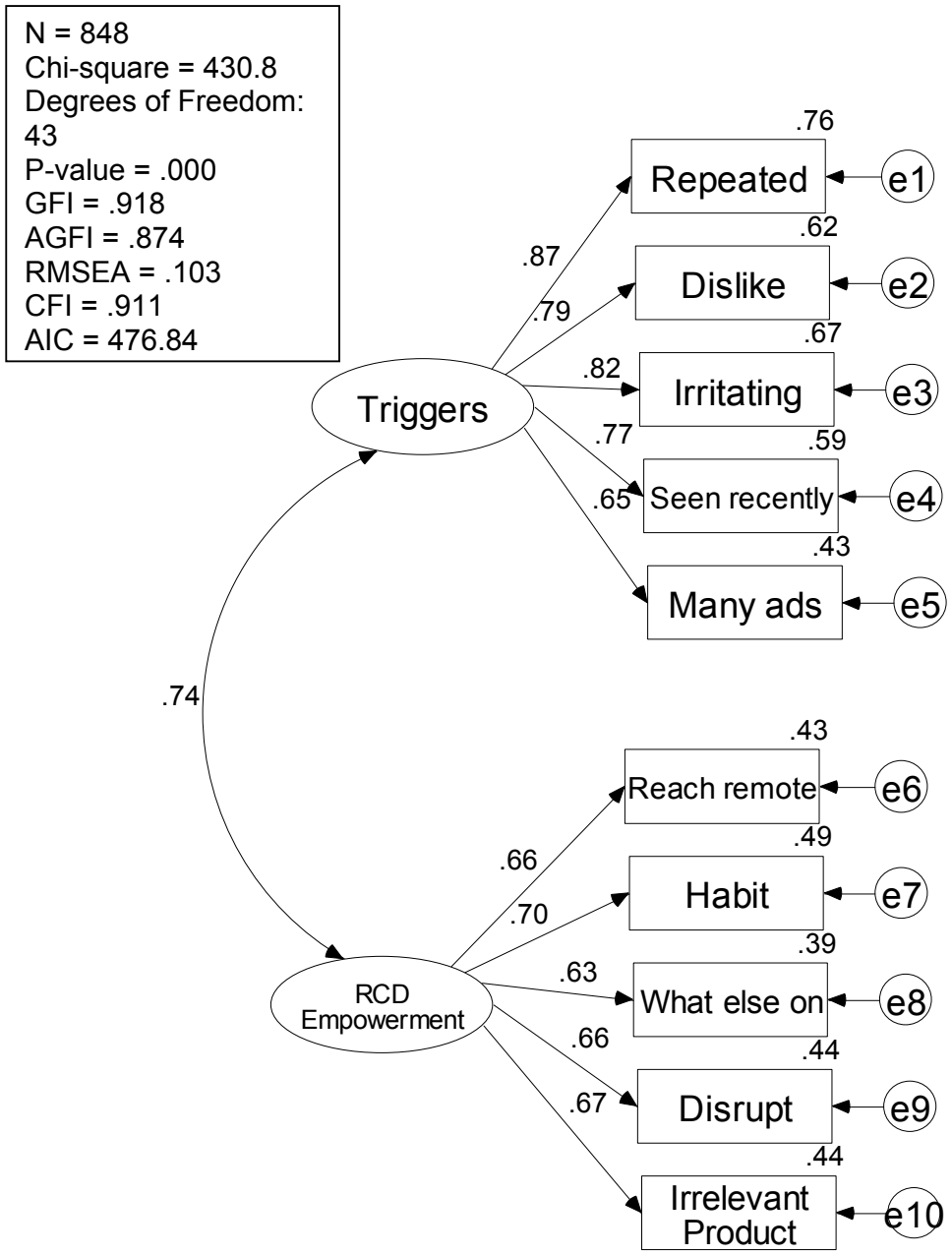
| Scale Item<br><br>I switch ….. | Factor One Advertising Triggers | Factor Two RCD Empowerment |
|---|---|---|
| An ad comes on that is repeated too often | 0.852 | |
| I dislike the commercial | 0.833 | |
| An irritating ad comes on | 0.823 | |
| An ad comes on that I have seen very recently | 0.770 | |
| There are too many ads on television these days | 0.638 | |
| I have the remote within my reach | | 0.779 |
| Out of habit | | 0.766 |
| So I can watch two programmes at the same time | | 0.696 |
| To see what else is on other channels | | 0.599 |
| The ads disrupt the programme that I am watching | | 0.551 |
| The advertised product has nothing to do with me | | 0.517 |
| Eigenvalues | 5.339 | 1.301 |
| Variance Explained | 48.53 | 11.82 |
| Alpha Co-efficient | 0.883 | 0.808 |

It is important to "replicate the scale's reliability using an independent sample" (DeVellis, 2003, p.136). Based on the sample drawn in the main study, the Cronbach alpha co-efficients for 'Advertising Triggers' and 'RCD Empowerment' are 0.883 and 0.808 respectively. Moreover, the co-efficients are higher for both factors relative to the pilot study which reinforces confidence in the reliability of the scale. Removal of scale items does not effect an increase in the reliability co-efficient for either factor (Appendix 5).

*Confirmatory Factor Analysis*

Confirmatory factor analysis was performed on data from the main study using AMOS. This analysis confirms the relevance of the two-factor measurement model. The fit of the measurement model is good, with a chi-square of 430 on 43 degrees of freedom and a goodness of fit index of 0.918 with a p-value of 0.000 as shown in Table 3.5.

**Table 3.5 Confirmatory Factor Analysis – Two Factor Solution**




The AGFI (0.874) indicates the satisfactory absolute fit of the model while the CFI (0.911) indicates a highly incremental fit. Moreover, the AIC (476.84) reflects a relatively parsimonious model.

***Step 6: Assess the Reliability of the Scale***

The reliability of the scale is supported by the use of multiple tests using different samples all reflecting levels of Cronbach alpha far higher than the benchmark 0.6 (Nunally, 1978).

In order to determine test-retest reliability, an "identical set of measures is applied to the same subjects at two different times" (Peter, 1979). The test-retest reliability of the scale was validated among randomly selected respondents on two testing occasions, two weeks apart. The stability of the scale is evidenced by the strong positive correlation coefficient ($r = 0.662$) between the two sets of scores (Appendix 6). This outcome indicates a highly significant association ($p = 0.01$) between score allocations in the two testing environments which serves to verify the reliability of the scale.

***Step 7: Assess the Validity of the Scale***

*Content Validity*

Content validity underlines the extent to which a measurement reflects the specific intended domain of content (Carmines & Zeller, 1979). There must be an adequate and representative set of items that falls within the domain of the concept (Sekaran, 1992). As such, to ensure the content validity, the SITUZAP scale items originate from a diversity of sources. Items derive from the literature as well as a group discussion designed to specifically address the drivers of 'situational channel switching'. In addition, scale items were reviewed and validated by a panel of experts from both practical and academic backgrounds. The synergy that evolves from these components of the scale development process contributes to the content validity of the scale.

*Criterion Validity*

Criterion validity is the extent to which a measure is related to actual behaviour or real-life outcomes (J. K. Eastman et al., 1999) and is more of a

practical issue than a scientific issue (DeVellis, 2003, p.50). A number of factors contribute to the criterion validity of the SITUZAP scale. The practicality of the approach used to collect data via human observers followed by the immediate collection of survey data after the final observation session contribute to the criterion validity of the scale development. Criterion validity is further enhanced via the video recording of programmes to verify the accuracy of data collected by observers. Finally, the remarkable consistency of time spent off-channel during advertising breaks across four observation sessions further validates the real-life application of the data set and the scale that derives from it.

*Discriminant Validity*

Discriminant validity refers to the lack of association between the scale and unrelated constructs (DeVellis, 2003, p.56). In order to demonstrate the discriminant validity of the SITUZAP scale, the correlation between the cognitive evaluation of advertising 'attitude towards advertising' and the situational factors underlying channel switching – Advertising Triggers and RCD Empowerment – is assessed. No significant correlation is expected between 'Advertising Attitudes' and 'RCD Empowerment' nor between 'Advertising Attitudes' and 'Advertising Triggers'. The results are displayed in Table 3.6.

**Table 3.6 Correlation between Ad Attitude and Situational Switching Factors**

| | | RCD Empowerment | Advertising Triggers | Attitude TV advertising |
|---|---|---|---|---|
| Attitude TV advertising | Pearson Correlation | .025 | -.050 | 1 |
| | Sig. (2-tailed) | .474 | .142 | |
| | N | 848 | 848 | 848 |

** Correlation is significant at the 0.01 level (2-tailed).

As predicted, neither 'RCD Empowerment' ($r = 0.025$, $p>0.05$) nor 'Advertising Triggers' ($r = -0.05$, $p>0.05$) are significantly correlated with 'Attitude towards Advertising'. This supports the discriminant validity of the scale in that factors

underlying the SITUZAP scale measure a construct different from Advertising Attitudes.

*Nomological Validity*

Evidence of nomological validity is demonstrated by significant correlations of the underlying scale dimensions with measures of constructs with which they are expected to be related (Churchill, 1979). There are underlying conceptual associations between 'Advertising Triggers' (which accounts for 48.5% of the variation in the SITUZAP scale) and 'Perceived Clutter'. The construct 'Advertising Triggers' includes the items, 'I switch if an irritating ad comes on' and 'I switch because there are too many ads on Television these days'. Since these items (irritating and excessive advertising) comprise the basis for measuring 'Perceived Clutter', these constructs, (Advertising Triggers and Perceived Clutter) should be empirically related.

**Table 3.7 Correlation between Advertising Triggers and Perceived Clutter**

| | | Advertising Triggers | Perceived Clutter |
|---|---|---|---|
| Advertising Triggers | Pearson Correlation | 1 | .247(**) |
| | Sig. (2-tailed) | | .000 |
| | N | 848 | 848 |

** Correlation is significant at the 0.01 level (2-tailed).

The significant Pearson correlation ($r = 0.247$, $p<0.01$) indicates that the SITUZAP scale is performing as might be expected with regards to 'Perceived Clutter', a related concept. Notably, the moderate nature of this correlation is more indicative of related constructs than of multiple measures of the same construct (J. K. Eastman et al., 1999).

**Psychometric Soundness of the Scale**

In summary, the psychometric soundness of the SITUZAP scale is displayed by the following characteristics:

- Repeated factor analysis indicates that the SITUZAP scale is two-dimensional.
- The scale demonstrates adequate test-retest reliability
- Acceptably high levels of coefficient alpha indicates that the scale is internally consistent
- The scale demonstrates discriminant validity as a result of 'RCD Empowerment' and 'Advertising Triggers' being uncorrelated with an unrelated construct, namely 'Attitude towards Advertising'
- The scale possesses nomological validity though its predicted moderate correlation between 'Advertising Triggers' and 'Perceived Clutter'.

**Summary**

In this chapter, a scale is developed (SITUZAP) to measure the situational factors that trigger a channel switch, based on the process outlined in a number of key directive texts (Churchill, 1979; DeVellis, 2003; J. K. Eastman et al., 1999). Having defined the domain construct, fourteen potential scale items were drawn from the literature and qualitative research. The scale was purified during the pilot phase and three scale items removed. The scale was re-tested during the main study via an independent sample, confirming the two-dimensional nature of the scale. One item that previously loaded onto factor 1 (product not relevant) loads onto factor 2. And one item that previously loaded onto factor 2 (too many ads) now loads onto factor 1. However, these item movements do not compromise the integrity of the factor definitions. Reliability analysis indicates that the scale is internally consistent with co-efficient alpha high across both pilot and main studies. Moreover, confirmatory factor analysis supports the two-factor measurement model while the test-retest result ($r = 0.662$) provides evidence of stability within the scale. Finally, the scale is verified for content, criterion, discriminant and nomological validity.

# CHAPTER FOUR: THEORETICAL FRAMEWORK AND HYPOTHESES

## Overview

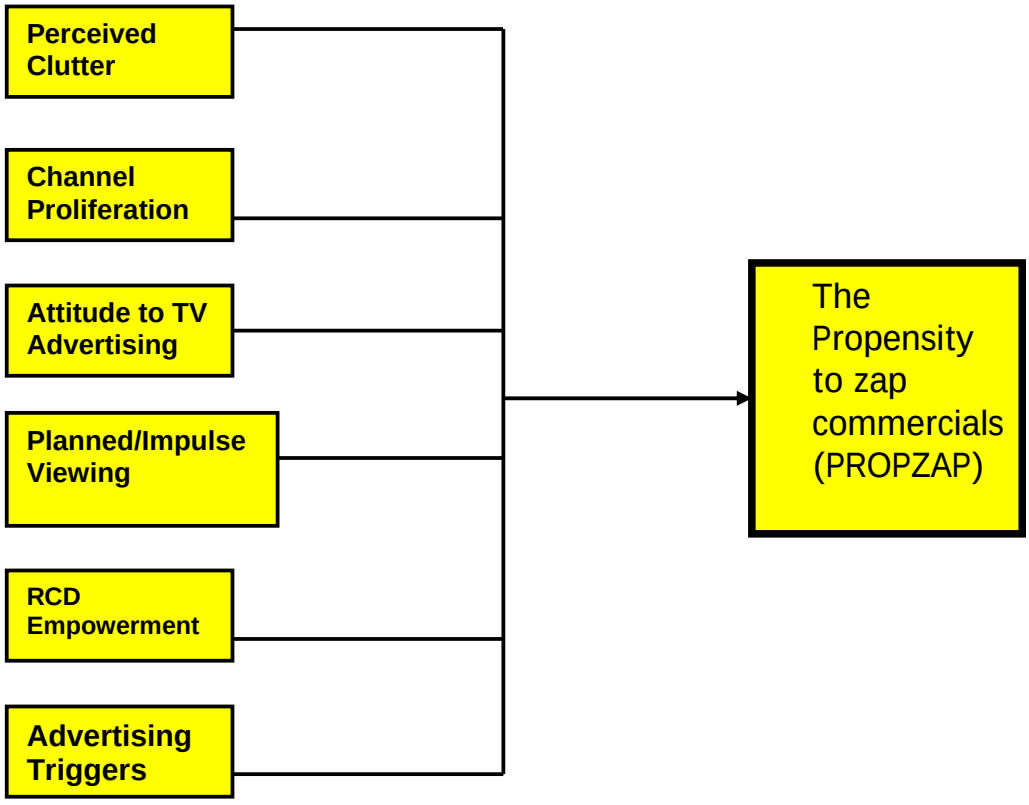
In this chapter the predictor and dependent variables are defined and included into the research framework. The predictor variables inherent in this study include Perceived Clutter, Channel Proliferation, Attitude towards Television Advertising and Planned versus Impulse Viewing. There are derived from the literature presenting as unmeasured potential determinants of channel switching activity. Moreover, two predictor variables deriving from the scale development process, Advertising Triggers and RCD Empowerment, are also included in the research framework. Two background variables, Demographic Influences and Programme Genre, are also included into the study. The influence of these variables on both the observed and reported propensity to switch channels during prime-time television advertising breaks is the focus of this work. Underlying theoretical foundations are presented to ground the hypotheses proposed in this study. These include Reactance Theory, Social Exchange Theory, Selective Exposure Theory and Play/Game Theory. The theoretical framework is outlined to provide a context and a theoretical rationale for the six hypotheses, each proposing an association between a predictor variable and the dependent variables.

## The Predictors of Channel Switching

From the literature, a number of variables have been proposed as either existing or potential predictors of channel switching behaviour (Cronin, 1995; Danaher, 1995; Ferguson, 1992; Ha & Litman, 1997; Heeter & Greenberg, 1985; Speck & Elliott, 1997; Webb & Ray, 1979). As a result of the innovative research methodology employed, a number of previously untested variables are included into this study. The primary objective of this study is to determine the effect of six independent variables (predictors) on the propensity to zap television commercials (dependant variable).

Figure 4.1 sets out the channel switching framework, in which the predictors of the propsensity to zap television commercials are modeled.

**Figure 4.1 Channel Switching Framework – The Predictors of PROPZAP**




**Independent Variables**

Six key variables are proposed to have a potential influence on the propensity to zap commercials.

***1. Perceived Clutter***

Perceived Clutter has been proposed as a potential predictor of channel switching behaviour (Ha & Litman 1997; Webb & Ray 1979). Perceived clutter is the viewers' perception of the extent of clutter as well as the irritation induced by television clutter. Perceived Clutter has been operationalised by Speck and Elliot (1998) whose scale is adopted in this study.

### *2. Channel Proliferation*

Walker, Bellamy and Traudt (1993c) found a clear link between access to cable television and RCD gratifications and use. Channel proliferation has been identified as potentially having an influence on channel switching (Danaher, 1995; Ferguson, 1992; Heeter & Greenberg, 1985; Kaatz, 1986). Moreover, since cable subscription is the most important predictor of channel repertoire (Ferguson, 1992), cable owners are likely to activate higher levels of channel switching relative to non-cable owners.

For purposes of this study, channel Proliferation is treated as a categorical (dichotomous) variable expressed in terms of having or not having access to cable television within the household.

### *3. Attitude towards Television Advertising*

Attitude towards television advertising is extensively researched in the literature (Bauer & Greyser, 1968; Bonnal, 1990; Mehta, 1998; Mittal, 1994; Muehling, 1987). This study proposes to validate the relationship between attitudes to television advertising and channel switching (Dix & Phau, 2003; Speck & Elliott, 1997). A proven four-item standard scale used in Speck and Elliot (1998) will be used to measure attitudes towards television advertising.

### *4. Planned versus Impulse Viewing*

Whether the viewer has planned to watch a particular programme has been identified as a factor that may impact on channel switching during commercial breaks (Heeter & Greenberg 1985; Speck & Elliot 1997). This study investigates whether planned versus impulse viewing affects channel switching during television advertising. Planned versus impulse viewing is treated as a categorical (dichotomous) variable, where viewers have either 'planned' or 'not planned' to watch a particular programme.

### *5. Advertising Triggers*

Based on the scale development process in chapter 3, Advertising Triggers emerged as the dominant factor in accounting for situational influences on commercial zapping (SITUZAP). This factor accounts for the switching behaviour triggered by the commercial itself, such as an 'irritating', 'disliked', 'recent' or 'often repeated' ad. This study determines whether Advertising Triggers impact significantly upon channel switching.

### *6. RCD Empowerment*

This predictor also emerges as a result of the factor analysis associated with the scale development process per Chapter 3. The remote control device (RCD) empowers the viewer to make channel selections during the advertising break that otherwise may not have been made. The RCD empowers viewers to select and control what they watch. RCD empowerment during the advertising breaks relates to how viewers switch to explore other channel offerings, seek programme continuity, habitually change channels or watch two programmes simultaneously.

## Background Variables

There are two background variables included into this study – Demographic Influences (age and gender) and Programme Genre.

### *1. Demographic Influences*

Demographic influences on channel switching are investigated as a background variable. Although demographic influences on channel switching behaviour have been extensively examined in past studies, this study will focus only on those factors that are most closely aligned with channel switching. Age and gender have been identified in the literature as the most influential demographic determinants of channel switching (Danaher, 1995;

Heeter & Greenberg, 1985; Kitchen, 1986; Perse & Ferguson, 1993; Speck & Elliott, 1997) and will be reviewed in this study.

### *2. Programme Genre*

Genre is proposed to influence the extent of channel switching during commercial breaks (Danaher, 1995; Tse & Lee, 2001). It is suggested that viewers' channel switching behaviour during commercial breaks may differ depending on the type of programme being watched. Five genres will be tested in this study – news, sitcoms, movies, quiz shows and other – to determine whether the extent of channel switching varies significantly according to the type of programme being watched.

## Dependent Variables for Channel Switching

To this point, the dependent variable has been broadly referred to as 'channel switching'. Clearly, the precise nature of this variable must be defined in order to identify its meaning and to operationalize its measurement.

### *Operationalizing Channel Switching*

Past studies are not consistent in their operationalization of channel switching. Some studies measure the percentage of audience who zap commercials (Greene, 1988; Kaatz, 1986; Tse & Lee, 2001). Others report on the percentage fall in ad break audience ratings compared to programme audience ratings (Danaher, 1995; Kneale, 1988) or the percentage of advertising time that is zapped (Danaher, 1995; Moriarty & Everett, 1994; Siddarth & Chattopadhyay, 1998; Zufryden et al., 1993).

This study adopts the latter definition of channel switching. For purposes of this study, the dependent variable is defined as the propensity to zap television commercials (PROPZAP). This is operationalized as the percentage of advertising time missed on the programme channel as a result of having switched to other channels. For example, viewers in household A

are watching the programme on Channel 7 and are exposed to an advertising break lasting 200 seconds. During the advertising break, the television set remains tuned to channel 7 except for 50 seconds when it is switched to channel 10. Therefore, household A's viewers are off-channel for 50 seconds of the 200-second long advertising break. Expressed as a percentage, the propensity to zap commercials (PROPZAP) equals 25% (50/200 x 100) of the advertising break. In effect, viewers have missed the opportunity to see 25% of the time allocated to advertising on Channel 7. Therefore, 25% of advertisers' expenditure is wasted on household A's viewers during the advertising break in question.

This assertion makes the assumption that the entire break consists of sponsored advertising messages. However, the advertising break may comprise non-programme material (NPM) other than advertising, such as station promotions or station identification messages (Danaher, 1995). In this study, the advertising break will be understood to contain both commercial and station messages (non-programme material) but this non-programme material is collectively referred to as an 'advertising break' or a 'commercial break'.

PROPZAP may be further refined to include two components of measurement - what actually takes place (observed percentage of advertising time zapped) or what the viewer reports to take place (reported percentage of advertising time zapped).

OBSERVED PROPZAP is the observed percentage of time that the viewer is exposed to channels other than the programme channel during advertising breaks. This can only be measured using the people meter, a video recorder or via in-home observation.

REPORTED PROPZAP is the viewer's estimate of the percentage of time that he or she is exposed to channels other than the programme channel during the advertising breaks. This is a self-reported measure gathered via survey data.

## Underlying Theory and Research Hypotheses

In summary, the study identifies six hypotheses in relation to the conceptual framework. The hypotheses are supported by relevant theoretical underpinnings. Reactance theory is the primary underlying theory (Speck and Elliot, 1997; Edwards, 2002) and has implications for hypotheses 1 and 2. It explains perceived clutter together with the concept of intrusiveness (which was edited from the original thesis but now reinstated) and interference as explained by perceptual grouping theory. Social Exchange theory was used in support of the above for hypothesis 3. Finally, gratifications and users theory is extensively reviewed and discussed in relevance to the topic to justify hypotheses 4, 5 and 6. The following are excerpts from the revised sections to justify each of the hypotheses.

### *Reactance Theory Defined*

Freedom implies that one can select from a number of potential options. Individuals seek to conserve their freedom to evaluate an object or behave in a particular manner. When free choice is threatened, individuals strive to safeguard their freedom. When freedom is removed, individuals strive to regain their lost freedom (Wicklund, 1974, p.4). Reactance refers to the arousal that stems from threatened or reduced behavioural freedom (Brehm, 1966, p.2).

There are a number of key tenets underlying reactance theory.

1. Reactance increases as the threat to the individual's freedom becomes greater (Wicklund, 1974, p.10).
2. The more important the threatened or removed behaviour, the greater will be the magnitude of the reactance (Brehm, 1966, p.4; Wicklund, 1974).
3. The magnitude of the reactance is directly related to the proportion of free behaviours eliminated (Brehm, 1966, p.16) and inversely proportional to the number of choice alternatives available (Brehm, 1966, p.36).

4. Reactance increases if the threat to freedom carries implications for future threats (Wicklund, 1974, p.11).

Generally, reactance results in some attempt to restore the lost freedom (if that is possible) or to overcome the threat of elimination (Brehm, 1966, p.10). This often manifests in the eliminated or threatened freedom becoming more attractive (Wicklund, 1974, p.11). Reactance may even "lead to attempts to improve one's abilities and skills in order to re-establish one's behavioural freedom" (Brehm, 1966, p.90). The reactant individual may opt to perform an equivalent, an associated (Brehm, 1966, p.11) or even a more difficult task to imply that the eliminated behaviour can be performed (Wicklund, 1974, p.11). Freedom can also be re-established via an agent. For example, a similar person exercising the eliminated behaviour may compensate for the individual's loss (Brehm, 1966, p.11).

***Reactance Theory in Context to TV Commercials***

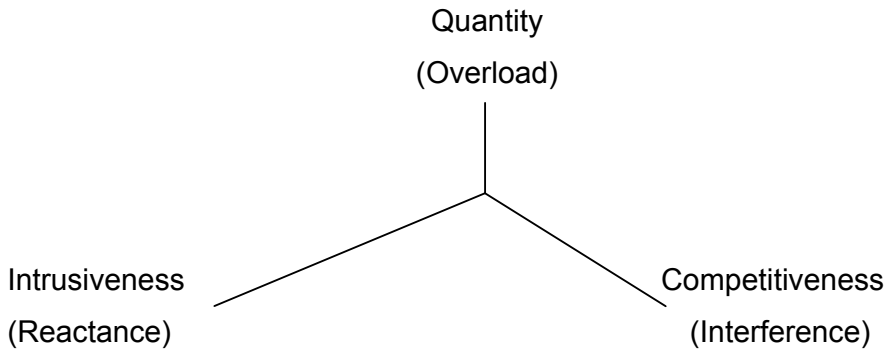
Reactance occurs in the television environment when programme content is withdrawn and is replaced by unwanted material such as station identification or commercial messages. In this situation, the attractiveness of the eliminated behaviour (watching television programmes) increases. Viewers seek to reinstate their behavioural freedom by switching channels in search of alternative programming. By switching to alternative programme material, a single viewer can effect a reactance response on behalf of all viewers present in the room.

Advertising breaks are recurring and therefore represent both a present loss of freedom as well as a threat or barrier to the continuity of programme viewing in the future. The on-going pattern of commercials interrupting programmes further stimulates the viewer's reactance tendencies. The RCD provides an accessible and easy-to-use reactance device that enables the viewer to avoid commercials and restore their freedom to watch programme content.

***Clutter – Theory of Intrusiveness and Perceptual Grouping Theory***

The perception of clutter is based upon three possible dimensions that account for the negative effect of clutter on information processing (Ha, 1996). These are quantity, competitiveness and intrusiveness (See Figure 4.2). Quantity is defined as 'both the number of advertisements and the proportion of ad space in a media vehicle' (Ha, 1996). Competitiveness is defined as 'the degree of similarity of the advertised products and the proximity between the advertisements of competitive brands in the same product category in a media vehicle' (Kent, 1993). Competitiveness causes interference by the similarity in the products and by the close proximity between the competitive advertisements (perceptual grouping theory).

**Figure 4.2 The Three Dimensions of Clutter**




Taken from: Ha (1996) Journal of Advertising Research

Intrusiveness is defined as the 'the degree to which advertisements in a media vehicle interrupt the flow of an editorial unit' (Ha, 1996) and is 'contrary to the goals of the media user' (Edwards, 2002). The psychological discomfort caused by the intrusion of advertising into the editorial domain leads to reactance. Media consumers react by skipping ads to re-establish their freedom (Ha, 1996; Edwards, 2002).

*Hypothesis 1a*

Perceived Clutter is a significant predictor of observed propensity to zap commercials.

*Hypothesis 1b*

Perceived Clutter is a significant predictor of reported propensity to zap commercials.

***Access to Cable Television – opportunity for Reactance***

Additional commercial television channels during recent decades, including cable television has dramatically increased television viewing options (Perse, 1990). The commercial zapper is virtually guarantted to find something to watch during the commercial break (Kaplan, 1985). Heeter and Greenberg (1985) report that cable viewers change channels more often during commercials than non-cable viewers. Moreover, multi-channel viewing has reduced the level of attention paid to commercials (Krugman et al., 1995).

Channel switching behaviour is positively correlated with both channels available and channels viewed (Abernethy, 1991; Kaye, 1994; McDonald, 1996; Speck & Elliott, 1997; Zufryden et al., 1993). Moreover, as can be expected, heavy zappers view on average 8.6 channels while light zappers view on average only 3.8 channels. (Kaye, 1994, p.114).

Clearly, cable television offers the viewer more choices. Based on Reactance Theory, this gives reactant viewers more options to restore their freedom to view editorial over advertising content. While Free-to-Air television viewers are 'roadblocked' by synchronized television commercials, cable viewers can exercise reactance to conserve their freedom to view editorial on a wide variety of cable channels.

*Hypothesis 2a*

Channel proliferation is a significant predictor of observed propensity to zap commercials.

*Hypothesis 2b*

Channel proliferation is a significant predictor of reported propensity to zap commercials.

**Social Exchange Theory (SET) Defined**

Social behaviour is "an exchange of rewards or punishments between at least two persons" (Homans 1961 as cited in Chadwick-Jones, 1976, p.154). Homans (1961) suggests that all social behaviour can be viewed as an exchange of activity between at least two persons with reward and cost implications (cited in Heath, 1976, p.1). There are five key propositions that underpin Social Exchange Theory (Chadwick-Jones, 1976, pp.159-162).

1. If a particular situation activity has been rewarded in the past, then the more similar a present stimulus situation is, the more likely this activity will recur.
2. The more often a person's activity is rewarded, the more likely that person will perform the activity.
3. The greater the value of the reward, the more frequent will be the activity that obtains it.
4. The more frequent a recent reward, the less value it will have.
5. The failure of an expected reward leads to anger or resentment.

***Relevance of Social Exchange Theory to Channel Switching***

The choice made by the individual is tempered by the rationality proposition. This suggests that a person chooses that alternative with greater value and probability of occurrence as perceived by that person at the time (Chadwick-Jones, 1976, p.209). In effect, therefore, the underlying contention in Social Exchange Theory is that people pursue activities and relationships that offer more attractive outcomes.

The primary motivation for viewing television is to derive its entertainment value (Stephenson, 1967, p.50). Although television commercials may provide some value to the viewer, they are perceived largely as repetitive and unwanted messages (clutter). Social Exchange Theory suggests that liking leads to interaction (Chadwick-Jones, 1976, p.185). Viewers seek to avoid

disliked non-programme content, searching instead for liked entertainment-based content on alternative channels.

Hypothesis 3 stems from Social Exchange Theory in that viewers are rewarded by programme content but are not rewarded by commercial messages. Therefore, favourable attitudes are likely to flow from watching programme content (desired outcome) while unfavourable attitudes flow from viewing commercial content (undesired outcome). Channel switching is most prevalent among those viewers who hold stronger unfavourable attitudes towards television commercials.

This hypothesis contends that the attitude towards advertising impacts strongly on what proportion of television advertising time viewers report to miss. However, attitudes to television advertising does not play a role in the proportion of television advertising that viewers actually do miss.

*Hypothesis 3*
Attitudes towards TV advertising is a significant predictor of reported propensity to zap commercials. Viewers with negative attitudes towards television advertising have a higher reported propensity to zap commercials.

**Uses and Gratifications Theory Defined**

This theory, first named by Katz (1959) suggests that communications research should focus on what people do with the media rather than what the media do to the people. "Uses and Gratifications" is an umbrella term used to describe an approach which involves a shift in focus from the purposes of the communicator to the purposes of the receiver (Rubin & Windahl, 1982).

Uses and Gratifications theory is based on three underlying assumptions:
1. Audiences are active.

Audiences are not passive recipients of communication. Rather audiences are made up of active individuals who use the media to achieve specific goals (McQuail & Gurevitch, 1974; Severin & Tankard, 1992). Different people use

mass communication for very different purposes (Rosengren, 1974; Severin & Tankard, 1992). Media patterns are shaped by expectations of what certain kinds of content offer to the media consumer (Katz, Blumler, & Gurevitch, 1973).

2. The audience member links need gratification with media choice.

Media users seek out a medium source that best fulfils the needs of the user. Moreover, media users have alternate choices to satisfy their needs (Katz et al., 1973). The same television programme may gratify different needs for different individuals.

3. The media compete with other sources of need satisfaction.

The needs served by mass communication are a part of the wider range of human needs. The degree to which these needs can be adequately met through mass media consumption depends on content, genre familiarity, and social context (Severin & Tankard, 1992).

Palmgreen (1984) further refines the Uses and Gratifications approach, setting out several strands including Gratifications and Media Consumption; Social and Psychological Origins of Gratifications; Gratifications and Media Consumption; Gratifications Sought and Obtained; Expectancy-Value Theory and Audience Activity. The first strand, Gratifications and Media Consumption suggests that media use is motivated by gratifications associated with the media consumption experience. This strand holds strong implications for television viewing in that viewers draw different levels of gratification from editorial versus advertising.

***Relevance of Uses and Gratifications Theory to Channel Switching***

Advances in media technology have enabled consumers to be more in control of media (Severin & Tankard, 1992). Researchers have applied Uses and Gratifications theory into the area of advertising. It has been proposed that advertising audiences are not 'passive advertising fodder' (Joyce, 1967). Rather, audiences choose to pay attention such that a commercial's only

value is that which the consumer gives it (McDonald, 1980). Advertising seems 'at least as fruitful an area for the application of uses and gratifications theory as any other element of the mass media' (O'Donohoe, 1994p. 71).

In the area of commercial zapping, viewers become active participants in shaping their television viewing experience. It has been argued that impulse viewers are more active in exploring 'what to watch' and are therefore more likely to switch channels during advertising breaks (Heeter & Greenberg, 1985; Wenner & O'Reilly Dennehy, 1993). On the other hand, planned viewers are less likely to actively engage in channel switching behaviour (Kaye, 1994, p.48). Viewers who specifically chose to watch a particular programme recalled 35% more commercials than those who watched for other reasons (Galpin & Gullen, 2000).

Media users seek out a medium source that best gratifies the needs of the user. The planned viewer settles in to watch a selected program. This viewer's needs are already fulfilled and he or she is less likely to explore programme options during the advertising break. However, the impulse viewer is in transition. As yet, the impulse viewer's needs are ungratified and therefore this viewer is more likely to explore programme options during advertising breaks to 'see what else is on'.

*Hypothesis 4*

Planned or impulse viewing is a significant predictor of observed propensity to zap commercials. Impulse viewers have a higher propensity to zap commercials than planned viewers.

***Uses and Gratifications Theory and the Remote Control Device***

A meta-analysis indicates that there is a dearth of attempts to build theory in remote control studies. Only 2 of fifteen studies attempt any theoretical explanation of remote control use (Frisby, 1999).

Based on a 1988 study, Ainsley (cited in Cornwell et al., 1993, p44) found that 67% of remote control users graze frequently. The RCD offers the user instantaneous control to select a customized viewing mix from broadcast, cable and VCR sources (Bellamy and Walker, 1996, p.4) to maximize viewer gratification (Bryant & Rockwell, 1993) and by serving as a 'catalyst for grazing' (Wenner & O'Reilly Dennehy, 1993). Access to a remote control device is a strong predictor of zapping behaviour (Abernethy, 1991; Heeter & Greenberg, 1985; McDonald, 1996; Zufryden et al., 1993).

Remote control devices empower television viewers to avoid commercials (Walker et al., 1993c; Wenner & O'Reilly Dennehy, 1993). In a study by Walker, Bellamy and Traudt (1993c), avoiding commercials was found to be the second highest rated reason (after 'finding out what's on TV') for using the RCD. Danaher (1995) notes that access to a VCR/remote control device is the most important predictor of household zapping behaviour.

The remote control device provides a means for the active viewer to express his or her viewing preferences. Different people use mass communication for very different purposes and the remote control empowers the viewer to gratify their personal viewing needs. This explains why, in group viewing situations, there is so much conflict (Copeland & Schweitzer, 1993; Perse & Ferguson, 1993) over who has the remote control and how it is used. The RCD is a reactance and a gratifications tool in which viewers shape their viewing environment.

*Hypothesis 5a*

RCD Empowerment is a significant predictor of observed propensity to zap commercials.

*Hypothesis 5b*

RCD Empowerment is a significant predictor of reported propensity to zap commercials.

***Uses and Gratifications Theory and Advertising Triggers***

The content of the commercial (Rojas-Mendez & Davies, 2005) in conjunction with the viewer's mood and arousal states (Bryant & Rockwell, 1993, p74) influences the likelihood of it being zapped. Commercials that evoke feelings such as pleasure and arousal are less likely to be zapped compared to commercials that communicate factual information (Olney et al., 1991). Moreover, previously unseen commercials enjoy a lower incidence of zapping (Siddarth & Chattopadhyay, 1998) relative to 'already seen' commercials and fully exposed ads.

One form of gratification that applies particularly to television advertising is how viewers use advertising breaks to structure their viewing time. Avoidance behaviour is the way in which an active audience manages their viewing time, for example, by leaving the room or reading a book (Kitchen, 1986; O'Donohoe, 1994). These are examples of how audiences seek alternative activities for enhanced gratification during advertising breaks. Equally, the uses and gratifications theory underlies the proactive audience member initiating a channel switch in response to an advertising stimulus such as an irritating, disliked, repeated or recent commercial. Television programs and commercials compete with other sources of need gratification. The desire to engage in a competing activity may be sparked by an irritating or repetitive advertising message. A reduction in viewer gratification via advertising content or context infringements may induce the viewer to switch channels, seeking alternate forms of viewer gratification.

*Hypothesis 6a*
Advertising Triggers are a significant predictor of observed propensity to zap commercials.

*Hypothesis 6b*
Advertising Triggers are a significant predictor of reported propensity to zap commercials.

**Summary of Hypotheses**

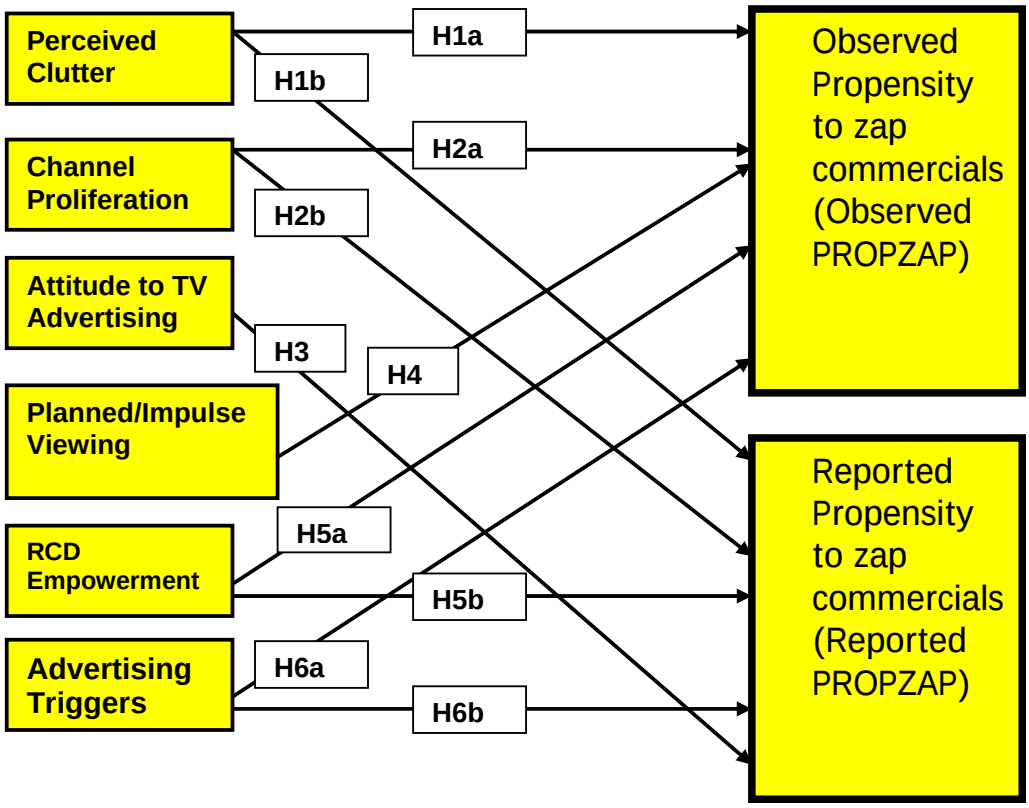
The hypotheses proposed in this study are summarized in Table 4.1.

**Table 4.1 Summary of Statements of Hypothesis**

| Hypothesis | Statement of hypothesis |
|---|---|
| *Hypothesis 1a* | Perceived Clutter is a significant predictor of observed propensity to zap commercials across all genres. |
| *Hypothesis 1b* | Perceived Clutter is a significant predictor of reported propensity to zap commercials. |
| *Hypothesis 2a* | Channel proliferation is a significant predictor of observed propensity to zap commercials. |
| *Hypothesis 2b* | Channel proliferation is a significant predictor of reported propensity to zap commercials. |
| *Hypothesis 3* | Attitudes towards TV advertising is a significant predictor of reported propensity to zap commercials. Viewers with negative attitudes towards television advertising have a higher reported propensity to zap commercials. |
| *Hypothesis 4* | Planned or impulse viewing is a significant predictor of observed propensity to zap commercials. Impulse viewers have a higher propensity to zap commercials than planned viewers. |
| *Hypothesis 5a* | RCD Empowerment is a significant predictor of observed propensity to zap commercials. |
| *Hypothesis 5b* | RCD Empowerment is a significant predictor of reported propensity to zap commercials. |
| *Hypothesis 6a* | Advertising Triggers are a significant predictor of observed propensity to zap commercials. |
| *Hypothesis 6b* | Advertising Triggers are a significant predictor of reported propensity to zap commercials. |

A diagrammatic summary of the six hypotheses within the channel switching framework is shown in Figure 4.3.

**Figure 4.3 Diagrammatic Summary of Hypotheses**




**Background Variables included in the study**

In addition to the six independent variables included in this study, the interaction effects of two background variables will be considered against PROPZAP in this study - Demographic factors and Programme Genre.

***Demographic Factors Affecting Channel Switching***

The are numerous studies that have investigated the interaction between demographic factors and channel switching (Copeland & Schweitzer, 1993; Danaher, 1995; Greene, 1988; Heeter & Greenberg, 1985; Kitchen, 1986; Krugman et al., 1995; Perse & Ferguson, 1993; Speck & Elliott, 1997; Walker

et al., 1993c; Zufryden et al., 1993). However, demographic predictors have been shown to play only a minor role in RCD use (Wenner & O'Reilly Dennehy, 1993) accounting for only 7.6% of the variance in television advertising avoidance (Speck & Elliott, 1997).

The two most influential demographics to emerge from the literature are age (Danaher, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1997) and gender (S. T. Eastman & Newton, 1995; Heeter & Greenberg, 1985). In this study, age and gender are treated as background variables. This status has been awarded to these variables as a result of their poor predictive significance in influential studies (Danaher, 1995; Speck & Elliott, 1997). In addition, the focus of this study is to test the potential predictive influence of previously untested independent variables on channel switching during television advertising breaks. Since age and gender have enjoyed a great deal of attention in past studies, it was considered appropriate to exclude them from the primary research framework. However, their inclusion as background variables into this study recognizes that the confirmation or disconfirmation of age and gender is necessary to advance the cumulative understanding of their potential role in influencing channel switching activity.

### *Age and Channel Switching*

There is no consensus in the literature regarding the age profile of the commercial zapper. Some studies in this area report that zappers tend to be younger (Heeter & Greenberg, 1985; Jonas, 1996; McDonald, 1996; Speck & Elliott, 1997; Zufryden et al., 1993). On the other hand, there are studies which show that age plays no role in channel switching (Cronin, 1995; Danaher, 1995)

Since the majority of studies support the interaction between youth and channel switching, this contention is upheld in the statement of hypothesis for the present study both in terms of observed and reported propensity to zap commercials.

*Hypothesis 7a*

Younger viewers display significantly higher levels of observed propensity to zap commercials than older viewers.

*Hypothesis 7b*

Younger viewers report a significantly higher propensity to zap commercials than older viewers.

***Gender and Channel Switching***

Females dominate the RCD in only 15.2% of households (Copeland & Schweitzer, 1993). Ainslie (cited in Perse & Ferguson, 1993) notes that more than half those woman who are forced to graze by other members of household enjoy television less during grazing. However, it appears that male dominance of the RCD applies more to older men. Younger men and women do not differ significantly in how often they change channels (Perse & Ferguson, 1993).

However, there is no overriding consensus in the literature regarding the gender of commercial zappers. Some studies propose that zappers are predominantly male (Copeland & Schweitzer, 1993; Greene, 1988; Heeter & Greenberg, 1985; Krugman et al., 1995; Perse & Ferguson, 1993; Walker et al., 1993c), Moreover, men are more likely to switch channels to avoid commercials, watch multiple programmes or seek variety whereas women are more likely to switch channels to watch a particular programme (Perse & Ferguson, 1993).

On the other hand, there are contradictory studies reporting that gender plays no apparent role in commercial zapping behaviour (Cronin, 1995; Danaher, 1995; Kitchen, 1986; Speck & Elliott, 1997).

Since the majority of studies support the interaction between gender and channel switching, this contention is upheld in the statement of hypothesis for

the present study both in terms of observed and reported propensity to zap commercials.

*Hypothesis 7c*

Male viewers display significantly higher levels of observed propensity to zap commercials than female viewers.

*Hypothesis 7d*

Male viewers report a significantly higher propensity to zap commercials than female viewers.

***Programme Genre and Channel Switching***

One study to date has investigated the relationship between genre and channel switching. Danaher (1995) compares channel switching during ad breaks across various genres. This is a New Zealand study based on second-by-second people meter data in a three-channel television environment. Jointly, programme genre and the duration of the ad break are identified as the most important factors influencing ADRATIO (the ratio of the ad-break rating to the programme rating). This study reports the ADRATIO among seven genres. These are listed in Table 4.2.

**Table 4.2 Adratio Percentages Based on Programme Type**

| **Programme type** | **ADRATIO** |
|---|---|
| Movies | 89.6 |
| Drama | 94.3 |
| Sports | 94.4 |
| Comedy | 94.5 |
| News/Documentary | 95.1 |
| Soaps | 95.5 |
| Game/Quiz shows | 101.4 ** |

**** Game shows not only retain their own audience but also attract 'grazers' from other channels.**

These results demonstrate that audience attrition is linked to the type of programme being watched. For example, on average, quiz shows retain their audiences while movies lose 10.4% of their audience during advertising breaks.

The genres used in the present study have been drawn to represent a cross section of those portrayed in the Danaher (1995) study. The highest (Quiz shows) and lowest performers (Movies) have been selected to exploit the most obvious variation in audience loyalty. News and Sitcoms have also been selected to represent the ADRATIO mid-range and for their distinctiveness as programme genres. These four genres are common during prime-time and present a good mix of programmes to further examine the effect of genre on channel switching in a naturalistic setting. Finally, all programmes outside of these four genres are collectively referred to as 'other' for purposes of this study. Genre is included into this study in order to identify whether it has an influence on channel switching so that further investigation into this area can be justified for future studies.

*Hypothesis 8:*
The Observed propensity to zap commercials varies significantly among programme genres.

***Summary of Statements of Hypotheses for Background Variables***

Table 4.3 contains a summary of the hypotheses for the identified background variables.

**Table 4.3 Summary of Statements of Hypotheses (Background Variables)**

| Hypothesis | Statement of hypothesis |
|---|---|
| *Hypothesis 7a* | Younger viewers display significantly higher levels of Observed propensity to zap commercials than older viewers. |
| *Hypothesis 7b* | Younger viewers display significantly higher levels of Reported propensity to zap commercials than older viewers. |
| *Hypothesis 7c* | Male viewers display significantly higher levels of Observed propensity to zap commercials than female viewers. |
| *Hypothesis 7d* | Male viewers display significantly higher levels of Reported propensity to zap commercials than female viewers. |
| *Hypothesis 8* | The Observed propensity to zap commercials varies significantly among programme genres. |

**Summary**

This chapter identifies six predictor variables (perceived clutter, channel proliferation, attitude to advertising, planned/impulse viewing, RCD empowerment and advertising triggers) and two dependent variables (observed PROPZAP and reported PROPZAP). These variables are presented within a research framework and the measurement for each variable within the model is outlined. Six hypotheses are presented, one for each underlying predictor variable. Moreover, a theoretical context is provided to substantiate and motivate each statement of hypothesis. Finally, two background variables (Demographic Influences and Programme Genre) are included in this study so that their potential influence on channel switching behaviour can be assessed. Demographic factors are included for verification while genre is included to determine whether further investigation is justified into this area.

# CHAPTER FIVE: METHODOLOGY

## Overview

This chapter provides an overview of the research method and process adopted in this study. The research methodology is a critical component in this study since it facilitates the collection of a data set not previously gathered in a single study.

The chapter outlines the research philosophy and direction for this study. The research objectives are revisited to determine an appropriate research method. The dual observation/survey research method employed provides the opportunity to examine potential predictors of channel switching that have not previously been studied. Observation and survey techniques are used in tandem to provide both observed channel switching data (per the observation) as well as viewer perceptions, attitudes and viewing circumstances (per the survey). The two-phase approach is tested and refined over two pilot studies. The first pilot confirms that a hidden observation study is feasible to monitor television viewer behaviour. Pilot 2 further explores the potential to observe advertising avoidance by determining what percentage of time the viewer's eyes are 'on the screen' during the ad break. Based on feedback from the pilot studies, refinements were made in both the observation approach as well as in the survey instrument. The pilot studies provide the inertia and justification for the observation/survey methodology employed in the main study. An exhaustive discussion of the main study follows with an explanation of the observation instrument, coding requirements and observer training. Finally, the size and nature of the sample, data entry and analysis approach are outlined.

## Justification for the Research Paradigm and Method

An outline of the research paradigm and method is necessary prior to the discussion of the method applied to this research. Social research comprises exploration, description or explanation (Babbie, 2001; Neuman, 2003).

Exploratory research seeks to generate an improved understanding of a particular issue to enable the formulation of more precise research questions. This form of research tends to be unstructured and favours qualitative methods of data collection.

Descriptive research pursues an area of research that already has an established foundation of understanding. The aim of descriptive research is to classify or categorise a particular phenomenon. Both qualitative and quantitative research methods may be used to conduct descriptive research.

The development of the SITUZAP scale to identity the situational factors that contribute to channel switching is a descriptive research pursuit. The findings of this preliminary research are outlined in Chapter 3 and this contributes to the research hypotheses developed in Chapter 4.

Explanatory research tends to go beyond description to seek the cause or reason that a phenomenon occurs (Neuman, 2003; Punch, 1998). The major focus of this study is explanatory in that the study seeks to identify the determinants of channel switching among live prime-time television viewers. The study further investigates the influence of age, gender and genre on the channel switching behaviour.

Having outlined the research approach in this study, the selection of an appropriate research paradigm should be considered. A paradigm is described as ‘an accepted model or pattern’ (Kuhn, 1979, p.23) or ‘a basic orientation to theory and research’ (Neuman, 2003, p.70). As proposed by Kuhn (1979):

“No natural history can be interpreted in the absence of at least some implicit body of intertwined theoretical and methodological belief that permits selection, evaluation and criticism (p.16).

A paradigm is necessary to identify what problems should be explored and what methods are appropriate (Bryman, 1988; Deshpande, 1983). The two research approaches relevant to the social sciences are positivism and interpretivism

(Carson, Gilmore, Perry, & Gronhaug, 2001; Neuman, 2003). Although there are many different views on the meaning of positivism (Bryman, 1988; Punch, 1998), the fundamental view combines deductive logic and empirical data regarding human behaviour in an effort to explain and predict that behaviour (Carson et al., 2001; Neuman, 2003). Based on a review of existing theory or research, positivism seeks to verify hypotheses via quantitative surveys, experiments and statistics. The primary focus of this research is to test a theory via empirical measurement and evaluation without subjective interpretation. Theory verification is an important component in the growth of a body of knowledge (Deshpande, 1983, p.106).

Interpretivsm focuses on understanding human behaviour by observation, taking into account the perspectives of the participants, the involvement of the researcher and the context in which the behaviour of interest occurs (Carson et al., 2001, p.5). Interpretivism uses an inductive approach (Blaikie, 1993) to build a theory by seeking out and understanding a phenomenon. The collection of both verbal and non-verbal communication is generally based on qualitative research methods.

It is proposed that positivism and interpretivism represent two extremes in a continuum of philosophies including critical theory, realism, constructivism, hermeneutics, humanism, natural enquiry and phenomenology (Carson et al., 2001). Each approach represents a different way of telling a story about society (Denzin & Lincoln, 1998, p.10).

There is considerable support in the research methods literature for combining qualitative and quantitative research (Bryman, 1988; Deshpande, 1983; Miles & Huberman, 1994; Punch, 1998). Bryman (1988) proposes that qualitative research can facilitate quantitative research in serving as a source of hypothesis, in the construction of scales or in the analysis of data. Deshpande (1983) suggests that qualitative fieldwork complements quantitative surveys in the area of survey design, data collection and analysis. Moreover, observation provides a context (Babbie, 2001) against which survey data takes meaning.

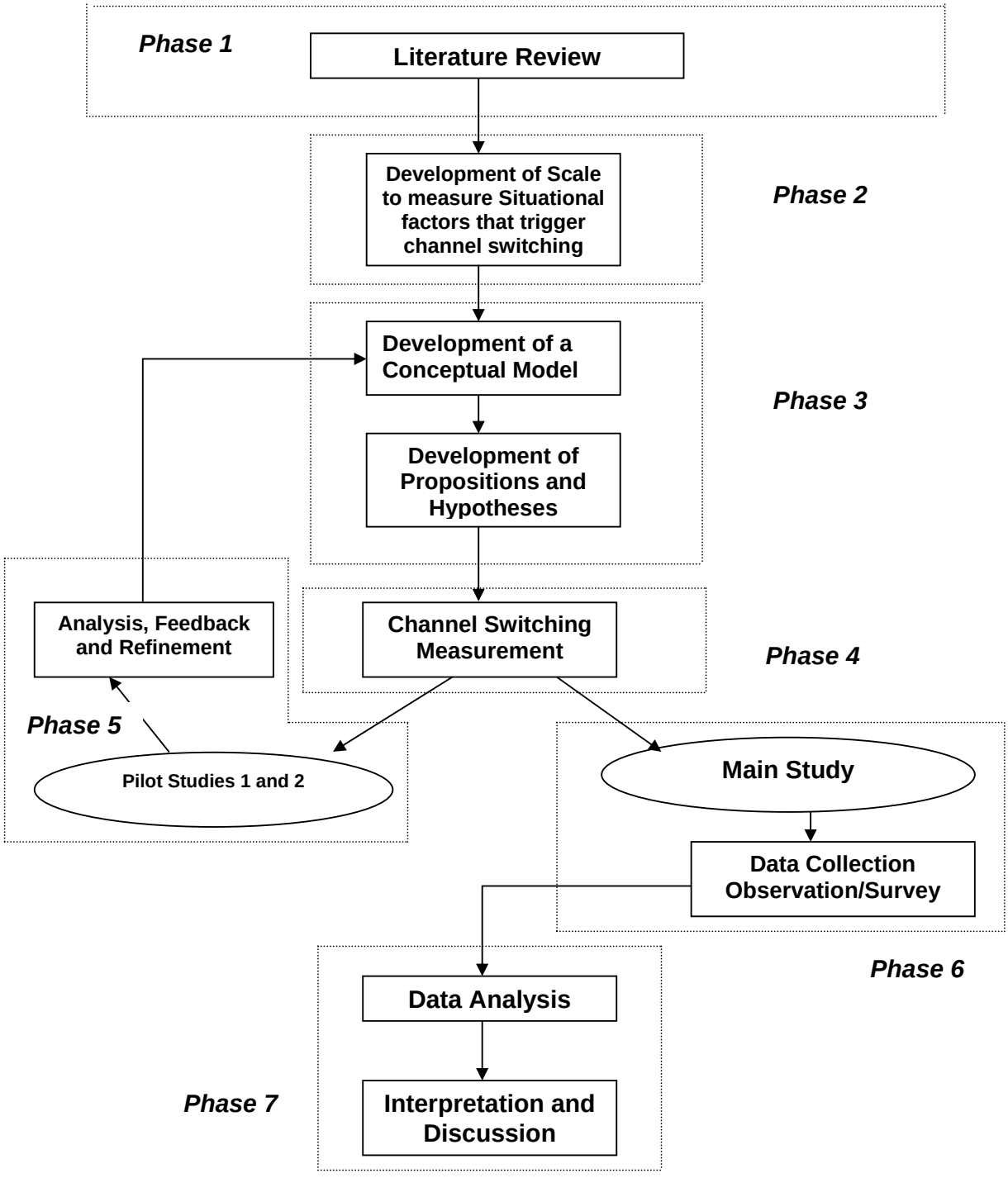
Neuman (2003) states that 'the two methods or styles have complementary strengths….a study using both is fuller or more comprehensive' (p.139).

This study employs a qualitative research approach to assist in the development of the SITUZAP scale as well as to derive and refine the research method during the pilot tests. The main study combines elements of both interpretivism and positivism via an observation and a survey phase respectively. The observation phase evidences a qualitative research approach wherein observers record television viewers' channel switching behaviour during commercial breaks. Thereafter, during the survey phase, quantitative data is gathered from these viewers to determine the predictors of channel switching behaviour. The combination of these research approaches offers two views of social reality (Bryman, 1988) providing a unique perspective incorporating both research philosophies – positivism and interpretivism.

**Overview of the Research Process Employed in this Study**

A schema representing the flow of the research process for this study is presented in Figure 5.1. From the literature review (Phase 1), the study progresses to the development of a scale to measure the situational factors affecting channel switching (Phase 2). Thereafter, the conceptual model is developed and corresponding hypotheses are stated (Phase 3). The measurement of channel switching (Phase 4) is effected via two pilot studies and the results are used to refine and reformulate the conceptual model (Phase 5). Thereafter, the main study is conducted (Phase 6) via the observation/survey research approach. The study concludes with the analysis, interpretation and discussion of data (Phase 7).

**Figure 5.1 A Schematic Overview of the Current Research Process**



## Evaluating Potential Data Collection Methods

Channel switching and television advertising avoidance studies have drawn on a variety of data collection methods. Data have traditionally been gathered via people meters (Danaher, 1995; Kneale, 1988; van Meurs, 1998; Zufryden et al., 1993) self-reported avoidance behaviour via telephone (Abernethy, 1991; Tse & Lee, 2001; Walker et al., 1993c), self-administered questionnaires (Copeland & Schweitzer, 1993; Heeter & Greenberg, 1985; Rojas-Mendez & Davies, 2005; Wenner & O'Reilly Dennehy, 1993), mail surveys (Speck & Elliott, 1997) and personal interviews (Greene, 1988; Kitchen, 1986; Yorke & Kitchen, 1985).

### *Data Collection Based on Self-Reports*

The primary data collection method for channel switching and commercial avoidance studies is via self-reports (Kaye, 1994; Walker & Bellamy, 1993b, p.12). Despite being the most common method, self-reporting is hampered by a number of limitations. Firstly, it is doubtful whether viewers can accurately reveal their own switching behaviour. Self-reports are subject to biases such as memory and social desirability effects (Ferguson, 1992 as cited in Kaye 1994; van Meurs, 1998). Moreover, Moriarty (1991) found that, in self reports, viewers underestimate their frequency of remote control use (cited in Cornwell et al., 1993, p47) and tend to 'oversimplify, distort or merge their actual behaviour' when self-reporting on their channel switching activities (Cornwell et al., 1993, p46). Secondly, researchers have tended to use relative scales ('never' to 'very often') rather than attempt to gather actual channel switching behaviour (Walker & Bellamy, 1993b).

### *Electronic Data Collection*

Although electronic monitoring provides accurate quantitative output (van Meurs, 1998), the channel switcher's identity and the circumstances underlying the use of the RCD remain unknown (Cornwell et al., 1993). Moreover, electronic measures such as people meters and cable converter

boxes do not capture short-interval dial switching (Cronin, 1995; Ephron & Gray, 2001).

Using an electronic monitoring technique, Kaye (1994) found that, on average, viewers switch channels almost ten times more (44.2 actual switches compared to 4.8 reported switches per hour) than they report to switch (Kaye, 1994, p.120).

***Laboratory Data Collection***

Laboratory observation may result in contrived behaviour (van Meurs, 1998). A laboratory study conducted by Ferguson (1992 as cited in Kaye, 1994, p. 21) reports that viewers actually use their RCDs to switch channels more often than they report to use them.

***Videotaping, In-home Observation and Diaries***

Videotaping is intrusive and is limited to small samples while in-home human observation has the problem of an obtrusive interviewer presence (Cronin, 1995) and difficulty in accurately recording quick changes in viewer activity (Cornwell et al., 1993, p48). Finally, asking the viewer to complete a diary requires considerable effort from the respondent. Moreover, diaries are subject to respondent fatigue with response rates as low as 40% to 50% of households (Beville, 1988, pp. 111-112).

**Research Objectives and Research Methodology Selection**

In selecting the most appropriate research methodology for this study, the research objectives underlying the study are revisited.

1. Establish the extent of channel switching behaviour during prime-time television viewing among the target sample group.
2. Develop a scale to identify the situational factors which provide the stimulus that triggers channel switching during television advertising breaks.
3. Determine the relative influence of identified predictors on channel switching during live prime-time television commercial breaks.
4. Compare the extent of channel switching during commercial breaks across age, gender and selected television genres.

In order to address these research objectives, the choice of methodology should satisfy the following criteria:

1. The study should be based on actual television viewing data in order to establish the extent of channel switching.
2. The study should be conducted in a natural setting in order to obtain realistic viewer data.
3. Contextual data should be collected in relation to a particular television viewing occasion. For example, programme genre and access to cable television services should be recorded.
4. The study requires that additional data be collected directly from the viewers in relation to the predictor variables under review – perceived clutter, attitudes towards advertising, planned versus impulse viewing and situational factors influencing channel switching.

## Proposed Research Approach

Based on the criteria outlined, a dual research approach is proposed which includes both a hidden observation and a survey component conducted in tandem.

### *Two-phase Observation / Survey method*

Researchers have called for advancing the methodological approach in studies on the use of the RCD (Kaye, 1994; Krendl et al., 1993; Walker & Bellamy, 1993b). In particular, calls have been made to utilize multiple research methods or triangulation (Hogg & Garrow, 2003; Walker & Bellamy, 1993b, p.12) perhaps in the form of a combination of personal observation and depth interviews as complementary processes (Krendl et al., 1993, p.138). Isolated studies have employed a triangulated approach using both observation and survey (Cronin, 1995). However, no studies to date in the area of channel switching have used a combination of hidden observation and survey in tandem. Dix and Phau (2003) have mooted that the realism of in-home observation followed by a self-completion survey provides a rich source of channel switching data within a naturalistic setting.

*(a) Observation Phase*

In-home observation has been used successfully to study a variety of television viewing issues (Kaufman & Lane, 1994; Kaye, 1994; Krugman et al., 1995; Krugman & Johnson, 1991; Lindlof, Shatzer, & Wilkinson, 1988; Lull, 1982; Reid & Frazer, 1980; Steiner, 1966; Stoneman & Brody, 1983). In order to keep the observation hidden, thus removing interviewer bias, the observer should preferably be a member of the household.

Since the subject(s) selects the location, viewing time and programme, this approach offers a naturalistic enquiry (Krugman et al., 1995). To date, this approach has not been used to measure the propensity to zap television commercials. However, it does have successful application in a number of television studies (Kaufman & Lane, 1994; Kaye, 1994; Lindlof et al., 1988;

Lull, 1982; Reid & Frazer, 1980; Stoneman & Brody, 1983) which supports its potential to successfully infiltrate a naturalistic setting.

In the present study, it is proposed that the ideal person to conduct an in-home observation is a university student. The student may assume the role under the guise of completing a television-related assignment (Dix & Phau, 2003) and is therefore least likely to raise suspicion from other household members.

Arguably, the ideal observer is a student of marketing research. This student is engaged in learning the principles of marketing research and is an ideal candidate to be trained as an observer and to be 'engaged in a television-related assignment'. Not only does this research exercise equip these students with relevant observation skills but it also offers them the experience of completing a practical research task. Moreover, most major universities have sufficiently large marketing research classes to generate a meaningful sample. Therefore, this approach can be replicated in all major cities worldwide.

*(b) Survey Phase*

Once the observation process is complete, the observer discloses his or her role and requests that viewers complete a survey. The survey can be used to gather valuable viewer data such as perceived clutter, attitudes to television advertising, planned versus impulse viewing and the influence of situational triggers on channel switching. In addition, the survey can be structured to gather viewers' reported channel switching for comparison with their observed channel switching activity.

The observer/survey research approach was refined over a period of eighteen months. Two pilot studies were conducted leading up to the main study.

**Pilot Study 1**

The first pilot study was exploratory in nature. The objective of this pilot study was to explore television viewer behaviour during a programme as well as during the advertising breaks. The task was applied by a group of 200 volunteer Marketing Research students. A similar approach was used in Eastman and Newton (1995) in which university students were trained to act as observers in 'natural residential settings'. This approach was employed to overcome the weakness inherent in self-reports.

Each student observer was required to conduct the task in his or her own household. Observers were required to monitor no more than three viewers during a single 30-minute observation session. The observer was required to keep an approximate record of time and to note the activities in which viewers engage while watching television (Appendix 7).

Following the observation phase, viewers were told that they had been monitored over the previous 30 minutes and were asked to complete a survey (Appendix 8). The self-completion survey required between 10 and 15 minutes to complete. Finally, the observer was required to complete a feedback form (Appendix 9) outlining the observation experience and what had been learned about advertising avoidance. Observers were asked to note any disruptions or problems encountered during the observation process. Moreover, observers were required to comment on whether they had managed to keep the observation hidden from household viewers.

It was clear from the feedback that observers could successfully conduct a hidden observation exercise within their own household. The data collected from this phase provided a qualitative insight into the typical behaviour of a television audience. Although this data set was not subject to formal analysis, it did support taking this methodological approach forward to the next pilot phase. None of the household members objected to being monitored by a member of household and all agreed to complete a survey at the request of the observer.

**Pilot Study 2**

At this point of the research, the intention was to conduct a study to focus specifically on television advertising avoidance behaviour. A key objective of this study was to determine whether it is possible for observers to track the viewer's 'eyes-on-screen' during the advertising breaks. 'Eyes-on-screen' would constitute the primary measure of visual attention to the commercial messages. The time difference between the total length of the advertising break and 'eyes-on-screen' would equate to 'eyes-off-screen' or visual inattention to the commercial messages.

In addition to 'eyes-on-screen', observers were required to monitor two other variables simultaneously over the duration of the advertising break. The observer was required to monitor whether the viewer was watching programme or non-programme material (advertising, station promotions or station identification) and to which channel the television set was tuned. Observers were given a time sheet (Appendix 10) and were required to note changes for the three variables under review in the appropriate time blocks.

For purposes of this pilot study, television advertising avoidance was operationalized as the percentage of time that the viewer's eyes were not on the screen during a commercial break. This pilot study sought to ascertain whether 'eyes-off-screen' was measurable via an observation research approach. If so, this measure could serve as a surrogate for both cognitive and behavioural television advertising avoidance. Mechanical avoidance could be simultaneously measured by monitoring the channel that the television set was tuned to. Moreover by noting whether viewers were tuned to programme or non-programme material, the study could also determine whether the viewer's channel switching had led to advertising (or other non-programme material) on an alternative channel. This would further provide the potential to evaluate how successfully stations 'roadblock' channel switchers.

The methodology proved to be too ambitious and a number of weaknesses emerged from this pilot study. Firstly, observers were only able to monitor one viewer's eyes-on-screen at a time. This raised the issue of which household viewer should be selected for observation. Although observers were instructed to select the person with closest access to the remote control, results would always be limited to one person within a group-viewing environment. Moreover, despite being closest to the remote control device, that person may not switch channels during the advertising break. This would result in a convolution of channel switching and 'eyes-on-screen' interaction effects.

Secondly, this approach did not successfully distinguish between cognitive and behavioural avoidance. 'Eyes-off-screen' may denote a viewer who remains in the viewing room but is not paying attention to the advertising (Cognitive avoidance). While this person avoids direct visual contact with the advertising, he or she may still get peripheral visual or auditory (unless the television set is muted) input from the advertising. However, for the viewer with 'eyes-off-screen' who is out of the room (behavioural avoidance), there is no visual input from the advertising and an auditory stimulus is less likely.

Thirdly, the feedback from this pilot indicated that it was not possible to observe a viewer's eyes-on-screen without it being obvious to that viewer. In many cases, the person being observed was unnerved by the constant visual attention and this led to atypical behaviour on their part. This approach was successful where the observer could be seated either behind the viewer or in an adjoining room adjacent to the viewing room. However, only a minority of viewing rooms offered the observer such an advantageous point of reference.

As a result of these limitations, it was clear that cognitive, behavioural and mechanical avoidance could only be simultaneously measured by means of a video camera installed into the viewing room. However, such a methodological approach precludes a large sample study. Therefore, it was decided to refine the scope of the study by excluding cognitive avoidance from the mix.

### *Methodological Refinements Resulting from Pilot Study 2*

The second pilot study provided the opportunity to effect a number of methodological improvements leading up to the main study. Refinements and improvements were made to both the observation and survey phases prior to the main study. Each issue is separately listed and the stated resolution was included in the main study.

1. The mobile phone used as a timing device may go off during the observed commercial break.
   Resolution: Set your phone to silent prior to each observation session.

2. Other viewers in the room engage you in conversation during the commercial break.
   Resolution: Speak to them as you usually would. If your data is compromised, you may need to abort the session and start a new session at a later time.

3. The viewer notices your working papers and becomes suspicious.
   Resolution: Acknowledge that you have a university assignment that requires you to monitor product placements within television programmes.

4. The viewer(s) do not complete watching the programme.
   Resolution: Abort the session and start a new session at another time.

5. The observation sheet is expressed in seconds only.
   Resolution: The observation sheet should be coded in minutes and seconds to correspond to the timing format on a mobile phone.

### *Survey Improvements Resulting from Pilot 2*

A number of survey limitations were identified and addressed during Pilot Study 2. A summary of these revisions is shown in Table 5.1:

**Table 5.1 Survey Revisions as a Result of Pilot Study 2**

| Question per Pilot 2 survey | Revised or new question per Main Study | Rationale for the revision |
|---|---|---|
| No question included | To what extent were you aware that you were being observed during the past 30 minutes of television viewing?<br>• Not at all aware<br>• Somewhat aware<br>• Aware<br>• Strongly aware | This question was added to the survey to indicate the success with which the observation component was hidden from the viewers |
| On average, how many hours of television do you estimate that you watch each day?<br><br>□ 0 – 1 hour<br>□ 1- 2 hours<br>□ 2 – 3 hours<br>□ 3 – 4 hours<br>□ 4 – 5 hours<br>□ More than 5 hours | On average, how much time do you spend watching television each day?<br><br>_____ hours/min | In order to gather more precise data and to remove the problem of overlapping response options, this was converted into an open-ended question. |
| Indicate your educational status based on the options below:<br><br>□ Currently at school<br>□ Completed part of all secondary schooling and am not studying further<br>□ Currently enrolled for a degree or diploma<br>□ Completed a Tafe or college diploma<br>□ Completed an undergraduate university degree or diploma<br>□ Completed a post-graduate qualification | Currently at secondary school<br><br>Other _____ | With the study being restricted to viewers over 15 years of age, the 'at school' option was qualified to 'being at secondary school'.<br><br>The list was made exhaustive by adding the 'other' category. |
| *Please answer this question only if you have cable TV in your household.*<br><br>What percentage of your viewing time do you estimate that you watch cable?<br><br>□ 0 – 25%<br>□ 26 – 50%<br>□ 51 – 75%<br>□ 76 – 100% | *Please answer this question only if you have Foxtel in your household.*<br><br>What percentage of your total viewing time do you estimate that you watch Foxtel?<br>_____% | Cable viewers in Western Australia can only subscribe to Foxtel. This was more clearly understood than the word 'cable TV'.<br><br>Response categories were replaced by an open-ended response option to gather more precise information |

In addition, observer feedback from Pilot Study 2 identified problems that had arisen during the survey phase. For example, it was apparent that some respondents were confused by what was meant by the term 'ad break' in questions 7, 8 and 9 (Appendix 11). This issue was resolved by the term 'ad break' being defined on the questionnaire in the main study in Question 13 (Appendix 23). ("When a number of ads are grouped together, this is called an ad break").

**Refinement of the Study Parameters**

The main study inherits its framework from the preceding pilot studies. As previously mentioned, a number of considerations had emerged from the second pilot study that makes an important contribution to the main study.

***Advertising Avoidance is a Complex Construct that should be Further Refined***

Television advertising avoidance behaviour includes cognitive, behavioural or mechanical avoidance (Kitchen, 1986; Speck & Elliott, 1997). Since viewers exhibit an array of ad avoidance activities, it is not possible to simultaneously observe all forms of ad avoidance except via a video camera installed into the viewing room. However, video monitoring is invasive, expensive and is associated with very small sample sizes.

The second pilot study set out to determine the extent of cognitive attention paid to the television commercials. This was measured by the percentage of time that the viewer's eyes are on the screen during the advertising break. As previously mentioned, this approach proved to be restrictive in that only one viewer could be monitored at any one time and the viewer became self-conscious as a result of being closely watched.

Accordingly, it was decided to narrow the scope of the study from 'advertising avoidance' to 'channel switching behaviour'. This refinement removes the measurement complexities inherent in cognitive avoidance. Mechanical

avoidance via a remote control device provides an identifiable avoidance activity (switching channel) and a measurable construct (percentage of the ad break spent off-channel). Moreover, in providing feedback, observers in the second pilot study noted that monitoring channel switching required their attention to be leveled on the television set. This meant that they blended in with the viewer group and were able to monitor channel switches without attracting attention.

Although channel switching takes place for a variety of reasons including sampling, curiosity, variety seeking and commercial avoidance (Bellamy & Walker, 1996; Heeter et al., 1993; Kaatz, 1986; van Meurs, 1998), there is strong evidence to suggest that channel switching accounts for a significant portion of television avoidance behaviour (Abernethy, 1991; Heeter & Greenberg, 1985; van Meurs, 1998; Walker et al., 1993c).

***Verifying Channel Switching as a Commercial Avoidance Behaviour***

It was decided to test this notion first-hand since it is important that, if the focus of the study were narrowed to channel switching, this body of work still makes a contribution to the area of advertising avoidance.

The first stage was to generate a list of viewing and/or avoidance behaviours during the advertising break. The list was garnered from the literature (Heeter & Greenberg, 1985; Walker & Bellamy, 1993b; Wenner & O'Reilly Dennehy, 1993).

These items were presented to 283 television viewers in the form of a self-completion survey (Appendix 12). Respondents were simply required to tick those activities in which they often engage during advertising breaks. A response option for “other” was provided to invite further ad break activities. The results of this survey are shown in Table 5.2 detailing both the percentage support for each option and whether the question is sourced from the literature or from feedback received from the pilot surveys.

**Table 5.2 Percentage of Respondents Engaged in Television Advertising Avoidance Activities**

| What activities do you <u>often</u> do during the advertising breaks on television? | % of respondents | Question Source |
|---|---|---|
| Change channel to see what else is on | 81.6% | Literature |
| Talk to others in the room | 55.1% | Literature |
| Change channel to watch another programme | 49.5% | Literature |
| Watch the commercials | 45% | Literature |
| Change channel to avoid the commercials | 37.1% | Literature |
| Leave the room | 33% | Literature |
| Read something | 13.8% | Literature |
| Use the computer | 11% | Literature |
| Turn down the sound on the TV | 10.6% | Literature |
| Get something to eat or drink | 10.6% | Survey |
| Mute the sound on the TV | 8.8% | Literature |
| Go to the toilet | 5.7% | Survey |
| Change channel to annoy others | 3.9% | Literature |
| Doze off | 3.5% | Literature |
| Make a phone call | 1.1% | Survey |
| Listen to music | 1.1% | Survey |
| Have a cigarette | 1.1% | Survey |
| Household chores | 1.4% | Survey |
| Do exercises | 0.7% | Survey |

Switching channel for purpose of avoiding the commercials was selected by 37.1% of respondents. This provides clear confirmation for the notion that advertising avoidance is at least a significant factor underlying the use of the remote control device (RCD) during commercial breaks on television.

Clearly, not all RCD activity can be attributed to advertising avoidance. However, since it is more important that viewers do zap commercials than why they zap them, this study will ignore the underlying motivation for channel switching. Rather, the focus of this study is on the extent of channel switching and the accompanying audience erosion that occurs during the advertising breaks. It is this lost audience that concerns the advertiser. Therefore, this study does not distinguish between a channel switcher who is looking to see what else is on versus one who is specifically avoiding the commercial break. Regardless of the underlying motivation for commercial zapping, the act of switching channel reduces the potential advertising audience available to

television advertisers. Nonetheless, it is important that advertising avoidance does contribute to the rationale for channel switching – and clearly this is so.

Consistent with previous studies, Table 5.2 shows that the primary activity during advertising breaks is 'changing channels to see what else is on television' (Heeter & Greenberg, 1985; van Meurs, 1998; Walker et al., 1993c). In fact, three of the top five activities during advertising breaks involve the use of the remote control device (RCD) to switch channels ('change channel to see what else is on', change channel to watch another programme', 'change channel to avoid the commercials'). This further validates a study that focuses on the impact of channel switching on advertising audience attrition.

**Motivating the Observation/Survey Approach to Measure Channel Switching**

Based on the pilot studies, the use of in-home observers to monitor television viewer behaviour in a naturalistic enquiry proved to be a viable research methodology for this type of study. It is proposed that this two-phase approach provides a methodological solution to a difficult measurement problem inherent in monitoring channel switching (Dix & Phau, 2003). It is possible to conduct a hidden observation provided that the observer is a student (preferably of Marketing Research) and a member of household.

The pilot studies confirm that household viewers exposed to a hidden observation are undeterred by having their viewing monitored and are willing to complete the survey instrument. Moreover, the realism of the observation phase coupled with the immediacy of the survey phase delivers a set of data with the potential to provide insights that were previously untapped using self-reports. For example, this methodology provides insight into the importance of how planned versus unplanned viewing may influence the propensity to zap commercials. Moreover, access to cable television can be studied as a potential influence on the propensity to zap commercials. Other potential predictors of channel switching behaviour that are accessible using the

observer/survey approach include perceived clutter, attitude towards television advertising, advertising triggers and RCD Empowerment.

Finally, this research approach provides the opportunity to investigate the importance of genre in moderating the propensity to zap commercials. Danaher (1995) indicates that audience attrition during the advertising breaks does vary according to nature of the programme. This study offers an ideal environment to further clarify the role of genre in moderating the propensity to zap commercials.

## The Main Study

### *Scope of the Main Study*

The scope of the main study is outlined in terms of a handful of key components, namely dependent variables, daypart considerations and age of participants.

*Dependent Variables Included in the Main Study*

The research framework that identifies the scope of the main study is outlined in Chapter 4 wherein the measurement framework and the statement of hypotheses are motivated. The primary dependent variable is defined as the viewer's 'propensity to zap television commercials' (PROPZAP). This is operationalized as the percentage of advertising time missed on the programme channel as a result of having switched to other channels. There are two versions of this variable – Observed and Reported PROPZAP – are included into the Research Framework. OBSERVED PROPZAP is the observed percentage of time that the viewer is exposed to channels other than the programme channel during advertising breaks. REPORTED PROPZAP is the viewer's estimate of the percentage of time that he or she is exposed to channels other than the programme channel during the advertising breaks.

Although the propensity to zap commercials (PROPZAP) is the primary dependent measure included in this study, two other secondary television advertising avoidance behaviours have been included. Leaving the room (PROPLEAVE) and muting the ads during the commercial break (PROPMUTE) are also measured in this study. The inclusion of these measures boosts the value of the study by addressing all mechanical and physical television advertising avoidance activities.

*Leaving the Room during Advertising Breaks (PROPLEAVE)*

Viewer absence is included in the study since it impacts directly on the viewer's potential to switch channels. Clearly, a missing viewer cannot switch channels during the ad breaks. For the solo viewer, absence from the viewing room during the advertising break precludes channel switching unless the viewer switches channel before leaving the room. In the case of multiple viewers, the absence of one or more viewers from the viewing room during the advertising break does not preclude the remaining viewers from switching channels. Absence from the room and channel switching are therefore not mutually exclusive.

This study monitors the time that each viewer spends outside of the viewing room during the advertising breaks. This is expressed as a percentage of the total advertising break. For example, if Person B is out of the room for 40 seconds of a 200-second advertising break, then s(he) is absent for 20% of the time and has missed the opportunity to see (OTS) 20% of the advertising.

Leaving the room is not a main effect for the purposes of this study. It is a secondary effect but merits inclusion as it contributes to our overall assessment of advertising avoidance behaviour within the context of television viewing. However, the percentage of time absent from the viewing room during advertising breaks is not intended to be included in the measurement framework.

*Muting the Television Set during Advertising Breaks (PROPMUTE)*

Muting the sound on the television set is a form of advertising avoidance that removes the auditory component and so reduces the impact of the advertising. Muting can occur while the television set remains tuned to the programme channel during the advertising break or when tuned to an alternative channel. Muting, channel switching and absence from the viewing room are not mutually exclusive activities. This study includes the measurement of muting only to determine the extent of this activity in relation

to other avoidance behaviours. There is no intention to explore the interaction effects between muting, channel switching and leaving the room. Therefore, muting is not included into the measurement framework.

*Daypart Considerations Inherent in the Main Study*

The study focuses on prime-time television viewing only. For purposes of this study, prime time is defined as that television-viewing period between 17.30pm and 22.30pm and includes both weekday and weekend viewing. This period typically commands the highest audience ratings for television stations and drives the majority of the station's advertising revenue.

*Age Considerations Inherent in the Main Study*

The study is limited to viewers 15 years or older. This approach acknowledges that children, especially pre-school children, have not yet developed grazing habits (Krendl et al., 1993). Moreover, prime-time television advertising is primarily targeted at the adult viewer. Limiting the study to viewers 15 years or older is therefore consistent with this prime-time audience profile. Finally, there are no ethical issues that emerge when researching viewers over the age of 15 years.

***Observation Data Collection in the Main Study***

The observation phase of this study comprises four separate observations sessions of 30 minutes each. The observer is required to code relevant viewer activity during all advertising breaks within each 30-minute interval. Depending on the programme being viewed, there may be one, two or three advertising breaks during a 30-minute interval. Since the observation takes place in a naturalistic setting, not all household viewers will be present at every session. However, by including four observation sessions into the study, it is intended to gather a meaningful PROPZAP profile for each viewer. Observers may elect to monitor programmes on commercial channels only – Channel Seven (7), Channel Nine (9) or Channel Ten (10). Channels 7, 9 and

10 account for 80% share in the Australian TV market and dominate the advertising revenues in Australia. For these reasons, these Free-to-Air channels (7, 9 and 10) were selected for observation. Observers may not monitor viewers watching Australian Broadcasting Corporation (ABC) or Special Broadcasting Services (SBS) programmes. Both ABC and SBS are state-sponsored channels. Although ABC is advertising free, SBS does air a limited amount of advertising. Moreover, observers are precluded from monitoring viewers watching cable television programmes as the advertising scheduling tends to be limited and inconsistent from one channel to the next.

Prior to the first advertising break during observation 1, the observer captures the date of the session, name of the programme, number of remote control devices in the viewing room, whether the household has access to cable television and the number of television sets in the household. The age and gender of each respondent is recorded for all observation sessions. In addition, the observer notes whether the viewer is a household member or a visitor (Appendix 21).

The study makes provision for a maximum of five viewers over the duration of the four observation sessions. Between one and five viewers (members or visitors) may be observed during any one session. Within the same household, any combination of viewers may be present for any one observation session. Therefore, at the completion of the four observation sessions, viewers included in the study may have been present for one, two, three or all four sessions.

The observation coding sheet (Appendix 21) is divided into 300 blocks of one-second each, totaling five minutes of coding time. The blocks are numbered in minutes and seconds to conform to the configuration of time as displayed on a mobile phone, wristwatch or stopwatch. The timing device is activated as the advertising break begins.

***Coding the Ad Breaks***

Each advertising break is accompanied by an observer coding sheet on which to record the relevant data. There are five distinct coding tasks inherent in the observation exercise. Firstly, in block "1", observers must enter the number denoting the television station (7, 9 or 10) to which the television is tuned. This identifies the programme channel that the viewers had been watching leading up to the advertising break.

Secondly, any channel switch must code the identity of the person making the switch as well as the identity of the channel to which the switch is made. Each member of household (or visitor) is consistently identified by a particular letter (A, B, C, D or E) across all observation sessions. Moreover, every channel is identified by its number (7, 9 or 10) or by appropriate letters (ABC, SBS or F = Foxtel). No attempt is made to identify which specific Foxtel channel viewers have switched to. Therefore, a switch to any cable programme is denoted by an "F". For example, "AF" indicates that person A has switched to Foxtel or "B9" indicates that person B has switched to Channel 9. This information is written into the appropriate time block denoting when the switch occurred.

Thirdly, observers are required to record when the television set is muted. For example, if person A mutes ("M") the television at 35 seconds, then an "MA" is coded into the block marked "35". If person C deactivates the muting function at a later time within the commercial break (for example at 2 minutes and 10 seconds), then "MC" is written into coding block "2:10".

Fourthly, observers are required to record any movement of viewers leaving or returning to the viewing room during the advertising break. Small letters (a, b, c, d, e) are used to indicate this movement. For example, if person B leaves the room after 20 seconds, then "b" is coded into the block marked "20". If person B returns after 1 minute and 25 seconds, then a "b" is also coded into the 1:25 block. If B does not return during the advertising break,

the presence of only a single “b” code denotes that this person did not return for the remainder of the advertising break.

Finally, the End of the advertising break is entered as an “E” in the appropriate time block on the coding sheet. If the viewer(s) returns to the target programme only after the advertising break has ended, this is denoted by a “P” (Programme) in the appropriate time block to indicate that they have returned to the programme. In this case, the observer will not know the exact time that the advertising break has ended.

***Analyzing the Observation Data***

After each observation session, data are extracted from the observer’s coding sheet and is transposed onto the following analysis page (Appendix 21). The length of time (in seconds) spent on each channel during the advertising break is recorded alongside that channel description. Channels ABC, 7, 9, 10, SBS and Foxtel are listed on the analysis page. The time intervals (in seconds) corresponding to each channel option are added to display the total length of the advertising break (in seconds). Those time intervals during which the television set is muted are recorded alongside the relevant channel to which the set was tuned while the muting took place. Finally, the number of seconds that each viewer is out of the room during the ad break is recorded alongside that person’s identifying letter (A, B, C, D or E).

Having observed all advertising breaks within the designated 30-minute period, a summary of the viewer activity within that time frame is compiled (Appendix 21). The time (in seconds) of each advertising break is noted (Column B). The time (in seconds) that viewers are tuned to channels other than the programme channel is also noted (Column C). The time away from the programme channel (Column C) is expressed as a percentage of the total time of the advertising break (Column B). This denotes the percentage of time that the television is off the programme channel during the ad break (Column D).

Thereafter, the length of all ad breaks within the observation period are summed (per Column B). The total time spent off-channel during all ad breaks is also summed (Column C). The total off-channel time is then expressed as a percentage of the total length of ad breaks (Col C/Col B x 100). This result (Column D) denotes an overall, weighted average of the percentage time spent off-channel during the 30-minute observation session under review.

Finally, the time interval that each viewer spends out of the viewing room is entered onto the analysis summary sheet. These time intervals are added for each viewer to reflect the cumulative number of seconds each person spends out-of-room during advertising breaks embedded into the 30-minute observation period. The total time each viewer is out of room is converted to a percentage of the total ad break time. This denotes the percentage of the ad break time that each viewer spends outside of the viewing room.

***Recording of Programmes over the Observation Period***

All television programmes are tape-recorded over the duration of the observation period. This has two important benefits. Firstly, the length of the ad breaks per the observation sheets can be verified to determine the observer's timing accuracy. Secondly, when viewers return to the programme after the ad break is over, the exact time that the ad break ends is unknown. By recording all television programmes, the length of each ad break is calculated and the time at the end of the advertising break ("E") is inserted onto the coding sheet. The analysis can then be adjusted to reflect viewer activity over the duration of the advertising break only.

***Self-Completion Survey Instrument***

In order to meet the objectives of this study, the observation is followed by a self-completion survey. Once the fourth (and final) observation session is complete, the observer reveals the real purpose of the observation exercise.

A letter from the researcher (Appendix 22) confirms to the viewers that the observer had been instructed to conduct a hidden observation task. The letter verifies the objective of the study and requests that the viewers complete the survey form (Appendix 23). Respondents are given the option of whether to participate and are guaranteed anonymity.

Observers were given a set of five identical surveys printed on yellow paper for ease of identification. Each survey is clearly marked for Person A, B, C, D and E. Observers are instructed to hand the relevant survey(s) to those viewers present at the end of the fourth observation.

The survey consists of two components – section A and section B. Viewers who were present during the fourth and final observation session complete both sections A and B. The aim of Section A is to determine viewer motivation for watching the programme selected, whether s(he) planned to watch that programme and how often each viewer estimates to have used the RCD. Since viewers are asked to complete the survey immediately after the final observation ends, respondents are questioned on their specific channel switching behaviour during the preceding 30 minutes.

Surveys forms are also given to those viewers who were previously observed but were not present for the fourth observation session. These surveys are administered at the observer's convenience as the questions do not relate to a particular viewing period. Respondents are required to complete section B only which focuses on television viewing in general.

Table 5.3 shows how each predictor variable is linked to a particular measurement item in the survey. Also included is the source from which the measurement is drawn where applicable.

**Table 5.3 Summary of Measurement for the Predictor Variables**

| Predictor Variable | Measurement item | Measurement Source |
|---|---|---|
| Perceived Clutter | The amount of advertising on television is…<br>Not excessive Excessive<br>1 2 3 4 5 6 7<br><br>The amount of advertising on television is….<br>Not irritating Irritating<br>1 2 3 4 5 6 7 | Speck and Elliot (1997) |
| Channel Proliferation | Do you have access to Foxtel (cable) television in your household? | Observer notes the presence or absence of access to cable TV |
| Attitude to TV advertising | I think that television advertising is interesting<br>I think that television advertising is enjoyable<br>I think that television advertising is informative<br>I think that television advertising is believable<br>**Strongly Disagree Strongly Agree**<br>**1 2 3 4 5 6 7** | Speck and Elliot (1997)<br>Scale confirmed in Main Study<br>$\alpha$ = 0.799 |
| Planned / Impulse Viewing | Did you plan to watch the programme that you have viewed during the past 30 minutes? | Viewer responds 'yes' or 'no' on the survey |
| RCD Empowerment | SITUZAP scale items | Scale development – Chapter 3<br>$\alpha$ = 0.808 |
| Advertising Triggers | SITUZAP scale items | Scale development – Chapter 3<br>$\alpha$ = 0.883 |

The survey (Appendix 23) also contains questions relating to background demographic variables (age and gender) as well as country of origin. Observers are required to code the genre in advance of each programme that they monitor (Appendix 21).

### *Attitude towards Advertising*

Scale items are subject to confirmatory factor analysis revealing a single-factor solution. This is evidenced by only one component having an eigenvalue greater than 1 that accounts for 62.66% of the total variance (Appendix 24). The analysis confirms a uni-dimensional measure for attitudes towards advertising.

Cronbach's alpha for the four-scaled items indicates an acceptably high level of reliability ($\alpha$ = 0.799). The scale is highly stable in that the reliability score increases only marginally to 0.809 if one item (believable) is deleted (Appendix 25).

Given the attitude scale's uni-dimensional nature, the mean of the four attitude measurement items was computed (Average Attitude). As expected, this average measure is highly positively correlated (r = 0.697) to the respondents' Overall Liking or Disliking of Television Advertising (Appendix 25).

### *Measuring Observed PROPZAP*

The observer is expected to monitor the advertising breaks embedded into four distinct programme occasions, each spanning 30 minutes. Depending on the genre and/or television station, it may be that the observation period includes one, two or three advertising breaks. For example, prime-time news programmes typically include three advertising breaks while movies may only have one ad break in a half-hour period.

Regardless of the number of ad breaks within the 30-minute interval, the average time spent off the programme channel is computed by determining the weighted arithmetic mean for time spent off-channel for the ad breaks per half hour observed. This calculation measures 'observed PROPZAP'.

For example:

**Table 5.4 Observer's Analysis of Channel Switching Activity**

| Column A | Column B | Column C | Column D |
|---|---|---|---|
| | **Total length of ad break in seconds (or best estimate if viewers return after ad break has ended)** | **Total time spent on channels other than the programme channel (in seconds)** | **Time spent on other channels as a % of total ad time** $\frac{\text{Col C}}{\text{Col B}} \times 100$ |
| Ad Break 1 | 185 | 120 | 64.86% |
| Ad Break 2 | 160 | 0 | 0% |
| Ad Break 3 | 200 | 100 | 50% |
| **Total of columns** | 545 | 220 | 40.37% |

The percentage of time spent off-channel is separately displayed for each advertising break (Column D). Moreover, the total time spent off-channel over all three advertising breaks (Total Column C) is displayed alongside the total length of the ad breaks themselves (Total Column B). Column C total is divided by Column B total and multiplied by 100 to give the overall weighted percentage time spent off-channel for all advertising breaks (40.37%) denoting observed PROPZAP for the 30-minute viewing period.

***Percentage of Advertising Time Spent Outside the Viewing Room (PROPLEAVE)***

A secondary variable introduced for purpose of this study is the percentage of advertising time spent outside of the viewing room (PROPLEAVE). Observers are required to note the time when viewers leave the room and return during ad breaks. An example of the analysis of this process appears in Table 5.5.

**Table 5.5 Observer's Record of Time Spent Outside the Viewing Room**

| | **Person A** | **Person B** | **Person C** | **Person D** | **Person E** |
|---|---|---|---|---|---|
| Ad Break 1 | 40 | 0 | | | |
| Ad Break 2 | 0 | 35 | | | |
| Ad Break 3 | 110 | 85 | | | |
| **Total** | 150 | 120 | | | |

Given that the advertising breaks within the half hour observation session totaled to 545 seconds, the percentage of time that each person spends outside the viewing room can be calculated:

Person A: 150/545 x 100 = 27.52%
Person B: 120/545 x 100 = 22.02%

***Percentage of Advertising Time that the Television Set is Muted (PROPMUTE)***

The percentage of time that the television set is muted during ad breaks is referred to as PROPMUTE. Observers are expected to note when the TV set is muted and by whom. An example is displayed in Table 5.6.

**Table 5.6 Observer's Record of Time for which the Television is Muted**

| ***Column A*** | ***Column B*** | ***Column C*** |
|---|---|---|
| **Channel** | **How many seconds was the TV tuned to each channel during the ad break?** ***** See note below** | **How many seconds (of those listed in column B) were muted?** |
| ABC | | |
| Channel 7 | 100 | 40 |
| Channel 9 | 50 | 30 |
| Channel 10 | 90 | |
| SBS | | |
| Foxtel | | |
| **Total** | **240** | **70** |

For the ad break analysed in Table 5.6, the television set had been muted for 29.17% (70/240 x 100) of the ad break time. These measures were separately recorded for each advertising break and the mean of the percentage time muted is represented as PROPMUTE.

***Summary of the Measurement of Dependent Variables***

A summary of the dependent variables and the measurement approach adopted for each is shown in Table 5.7.

**Table 5.7 Summary of Measurement for Dependent Variables**

| Dependent Variable | Measurement item |
|---|---|
| Reported PROPZAP | SURVEY : QUESTION 10<br><br>On average, what percentage (%) of the ads do you think that you miss on the channel that you are watching because the channel has been switched?<br>____% |
| Observed PROPZAP | Taken from observer coding sheets |
| Reported PROPLEAVE | SURVEY : QUESTION 11<br><br>On average, what percentage (%) of the ads do you think that you miss on the channel that you are watching because you have left the room?<br>____% |
| Observed PROPLEAVE | Taken from the observer coding sheets |
| PROPMUTE | Taken from the observer coding sheets |

***Observer Training***

A brief for the observation task (Appendix 13) was posted on the intranet three weeks before the commencement of the training phase. The objective was to prime the student group regarding the nature of the task. Students were instructed to periodically watch television with a pen, paper and mobile phone in hand under the guise of monitoring television programmes. The purpose of this was to get household members accustomed to the observer being in the television room with assignment materials in hand. To address any suspicion as to what s(he) was doing, the observer was instructed to say that s(he) is completing a university assignment on product placement which requires that s(he) conducts some television monitoring.

Thereafter, students received training once a week over a period of three weeks. A copy of the transcript for each training session was handed out to students at the end of each session to reinforce their learning.

Training session 1 has an orientation focus in which the nature of the task is confirmed and expectations for the task are detailed (Appendix 16). A key component in this session is to determine whether each student has access to a timing device. The preferred device is the mobile phone, as this will attract least attention to the observer. One disadvantage that stems from using a phone is that it may ring during the session. This can be avoided by de-activating the ring tone. For those without access to a mobile phone, a stop-watch or a wristwatch would suffice. In addition, students were given the researcher's telephone and email contact details and were invited to address any questions or concerns directly to the researcher.

Session 2 outlines the mechanics of the coding process (Appendix 17) and takes the student group though a simulated observation using a video recording of a family viewing television. Students were required to conduct at least two practice observations before the third and final training session. Developing proficiency in keeping track of time while simultaneously noting switching, muting and viewer movement can be achieved over two practice occasions.

The objective of Session 3 (Appendix 19) is to consolidate the coding system and provide a further simulation exercise. During this session, students were shown how to complete the analysis sheets (Appendix 18) based on the data collected during the coding process. This session was also used to highlight the key elements of the observation process and any student concerns and enquiries were addressed. A list of frequently asked questions (Appendix 20) generated by student email enquiries throughout the training process was given to the students as both an easy-reference and a refresher.

***Timing of the Main Study – Phase One and Phase Two***

The main study was conducted over two phases of research. The first phase occurred between 30 August and 21 September 2004. Observers were instructed to select four viewing occasions for the genres included in the study – Movies, News, Sitcoms and Quiz Shows. This was done so that the

programme sample conforms to the genres selected for the study (Appendix 18).

During phase one, observers were required to select any two genres (from the four specified genres) and observe two sessions within each selection. Where possible, consecutive episodes of the same programme were deemed to be preferable but not essential. In order to meet these objectives, observers were given an extensive period of time (23 days) to complete the required observations.

Phase Two of the main study was conducted over 14 days between 22 March and 4 April 2005. In Phase Two, observers were free to select any genre of their choice but were encouraged to favour those selected from Movies, News, Sitcoms and Quiz shows. A sufficiently large sample of observations conforming to the specified programme genres had been collected during Phase One. This provided the opportunity to compare the extent of channel switching during programme genres outside of those prescribed by the study framework.

Both studies were conducted outside of any special television events. Phase One was started just after the completion of the Olympic Games in Athens (2004) so as avoid the skewed viewing patterns that typically associate with this auspicious event.

## Sampling Approach

This section focuses on non-sampling errors, sample size considerations and the respondent profile for the main study. A breakdown of respondents per genre is also included.

### *Non-Sampling Errors*

The methodological approach used in this study minimizes the extent of non-sampling errors (Churchill & Iacobucci, 2002, p.549). As a result of the hidden

nature of the observation, all observers were able to gather data relatively easily. There were obviously no 'not-at-homes' and only one household refused to cooperate in the survey phase once it was revealed that their viewing behaviour had been monitored. There were few field errors. Missing response items appeared on 5 surveys and there were 8 surveys in which viewers present during observation 4 had failed to complete Section A of the survey. Households from which incomplete surveys were received were omitted from the study.

***Sample Size***

The sample size required to estimate the outcome variable (PROPZAP) is calculated below. This estimate is based on the formula to estimate a population proportion (Churchill & Iacobucci, 2002, p.509).

Sample size estimate (n) = $z^2$ $(1 - \pi) / r^2$ $\pi$

| Parameter values: |
| --- |
| Z = 2 (At the 95% level of confidence)<br>The estimated population proportion ($\pi$) = 0.4 or 40%<br>The desired level of relative precision ( r ) = 0.1 or 10% |

Sample size estimate = $2^2$ $(1 – 0.4) / (0.1)^2$ $0.4 = 2.4 / 0.004 = 600$

Moreover, a guide to the sample size required for a typical people or household study indicates that an average number of sub-groups for a regional study would require 500 – 1000 respondents (Churchill & Iacobucci, 2002, p.515).

There are 848 respondents included in this study providing a statistically adequate sample size to estimate PROPZAP. Overall, the study comprises 319 households, 848 viewers/respondents and 1,276 separate observation occasions.

Initially, 212 households were observed during phase one. Twenty-five households were rejected as incomplete and/or inaccurate, leaving a total of 187 usable sets of household data. This amounted to 488 viewers with an average of 2.6 viewers per household. In all, there were 748 separate observation sessions conducted during phase one.

Phase two comprised 154 households of which data from 22 households were rejected as a result of incompletion and/or inaccuracy, leaving a sample size of 132 households. This accounted for 360 viewers/respondents with an average of 2.72 viewers per household. In all, there were 528 separate observation sessions conducted during phase two.

**Table 5.8 Main Study - Sample Size Summary**

| **Phase** | **Number of households** | **Number of viewers or respondents** | **Average viewers per household** | **Total number of observations** |
|---|---|---|---|---|
| One | 187 | 488 | 2.6 | 752 |
| Two | 132 | 360 | 2.72 | 531 |
| **Total** | **319** | **848** | **2.66** | **1283** |

### *Main Study - Respondent Profile*

The respondent profile is displayed in Table 5.9. The profile is shown for age, gender, education, country of origin and cable access.

**Table 5.9 Respondent Profile – Percentage in each Category**

| | Age | Gender | Education | Country of Origin | Cable TV Access |
|---|---|---|---|---|---|
| 15 - 19 | 19.9 | | | | |
| 21 – 29 | 57.2 | | | | |
| 30 – 39 | 2.1 | | | | |
| 40 – 49 | 10.4 | | | | |
| 50 – 59 | 9.3 | | | | |
| 60 – 69 | 1.1 | | | | |
| Male | | 49.1 | | | |
| Female | | 50.9 | | | |
| At Secondary School | | | 6.1 | | |
| Complete Secondary | | | 11.9 | | |
| Enrolled for Tertiary | | | 39.6 | | |
| Completed Diploma | | | 9.6 | | |
| Complete Degree | | | 25.5 | | |
| Complete Post-grad | | | 3.7 | | |
| Other | | | 3.7 | | |
| Australia | | | | 26.2 | |
| Singapore | | | | 7.2 | |
| Indonesia | | | | 15.7 | |
| Malaysia | | | | 18.4 | |
| UK | | | | 2.2 | |
| Other | | | | 30.3 | |
| Have cable | | | | | 11.8 |
| Do not have cable | | | | | 88.2 |

### *Observations by Genre*

Based on the selected genres, the observation sessions are shown in Table 5.10. These range from 182 observations (Sitcoms) to 419 observations (News).

**Table 5.10 Number of Respondents within Genre Categories by Observation**

| Genre | Obs 1 | Obs 2 | Obs 3 | Obs 4 | Total | Total % |
|---|---|---|---|---|---|---|
| **Movies** | 29 | 59 | 60 | 61 | 209 | 16.3% |
| **News** | 127 | 105 | 86 | 101 | 419 | 32.6% |
| **Quiz show** | 34 | 54 | 49 | 47 | 184 | 14.3% |
| **Sitcom** | 53 | 36 | 49 | 44 | 182 | 14.2% |
| **Other** | 81 | 67 | 75 | 66 | 289 | 22.6% |
| **Total** | 324 | 321 | 319 | 319 | 1283 | 100% |

**Data Entry and Analysis of Data**

Data were coded into SPSS for subsequent analysis. Missing items and outliers were identified and source data were referenced to replace and/or correct any inaccuracies in the data set. Appropriate techniques to analyse the data are employed and this is discussed in Chapter 6.

**Summary**

Overall, the methodological approach used in this study facilitates the collection of data that can address the statements of hypotheses. The observation/survey approach unlocks the potential for testing the identified predictors of channel switching. This methodology addresses many of the weaknesses inherent in other studies to date. Notably, it overcomes the memory and social desirability biases inherent in self-reports (Ferguson, 1992; van Meurs, 1998) as well as viewer's underestimation of remote control use (Cornwell et al., 1993).

The main study is preceded by two pilot studies during which various methodological options are tested and refined. The research approach adopted in the main study consists of four hidden observations conducted by a student of marketing research in their own household. The observer acknowledges his or her true intent after the fourth observation session.

Thereafter, household members observed during any of the four observation sessions are handed a self-completion survey. Surveys are marked for person A, B, C, D or E such that each person's survey data can be linked to their observed channel switching.

During phase one of the main study, observers were required to 'catch' household members watching one of four selected genres (Movies, News, Sitcoms and Quiz shows). Phase two allows observers to select from any programme genres, thus creating a category for 'Other'.

# CHAPTER SIX: RESULTS AND DISCUSSION

## Overview

In this chapter, the analysis is conducted and findings are discussed. Prior to the analysis, Type I and Type II errors are addressed. The assumptions of parametric data are verified, in which four underlying criteria are met. The results based on the analysis of the data set are reported and discussed simultaneously in order to support the continuity and flow of the research findings. Hypotheses are addressed, reported and findings are discussed in relation to each statement of hypothesis. This chapter outlines those factors that are significant predictors of observed channel switching (observed PROPZAP) and reported channel switching (reported PROPZAP). RCD empowerment is the only significant predictor of Observed PROPZAP while RCD Empowerment, advertising triggers and perceived clutter are significant predictors of reported PROPZAP. Moreover, the age of the viewer has a significant influence on observed PROPZAP but not on reported PROPZAP. However, neither gender nor genre is significantly associated with observed PROPZAP.

## Type I and Type II Errors

If the null hypothesis is rejected when in fact it is true, this results in a Type I error. Since the hypotheses in this study are set up to express a statistical relationship between predictor and dependent variables, a Type I error is the probability of there being such no relationship when the data analysis suggests there is one (the null hypothesis is accepted when it is in fact false).

Type II errors occur when a false hypothesis is not rejected (Zikmund, 2003, p.560). In terms of how the hypotheses are set up in the present study, this means that the proposed relationship between predictor variable and dependent variable is falsely accepted (the null hypothesis is rejected when it is in fact true).

Type I and type II errors are a trade-off, in that the smaller the Type I error potential, the larger the potential for type II error (Field, 2005, p.31).

The probability of a type I error occurring is 5 per cent ($\alpha < .05$) for the present study. The selection of this significance level reduces the problem of a disproportional increase in Type I error probabilities, when conducting several tests with the same data (Field, 2005, p.33). Moreover, the large sample size ($n = 848$) included in this study minimizes the potential for Type I error (Zikmund, 2003, p.560). Statistical power is the ability of a test to detect an effect size and reflects the robustness of the study (Field, 2005, p.33). At the standard level of $\alpha = .05$, and a recommended statistical power level of .8, then 783 participants are need to detect a small effect size (Field, 2005, p.34). Since the sample size in this study is in excess of 783 respondents, the potential for Type I error is minimized.

**Addressing the Assumptions for Parametric Data Analysis**

Parametric statistical tests involve making assumptions about estimates of population characteristics or parameters (Jackson, 2003, p.126) and are based upon the use of means, standard deviations and variances (Roberts & Russo, 1999, p.8). Generally, parametric tests are robust but they do require that four basic assumptions are met (Field, 2005, p.64):

1. Normally distributed data
2. Homogeneity of variance
3. Interval data
4. Independence

Each of these assumptions is tested in turn:

***Normally Distributed Data***

Measures for skewness and kurtosis are extracted from the data (Appendix 26) and are converted to z-scores as shown in Table 6.1. The absolute value of z-scores exceeding 1.96 indicates significant skew or kurtosis (Field, 2005, p.72) in the underlying data set. Based on this level, all independent variables other than Attitude to Advertising are significantly skew ($p < 0.05$). While Perceived Clutter (0.33) and Age (1.423) are positively skew, Advertising Triggers (-0.728) and RCD Empowerment (-0.19) are negatively skew.

Perceived Clutter, Attitude to Advertising and Age all display significant levels of kurtosis with z-scores in excess of 1.96. However, while the distributions for Perceived Clutter (-0.703) and Attitude to Advertising (-0.7) are negative and therefore flat, Age is a pointy distribution indicated by its positive value (0.603).

**Table 6.1 Skewness and Kurtosis – Independent Metric Variables**

| | Perceived Clutter | Attitude to Adv | Advertising Trigger | RCD Empower | Age |
|---|---|---|---|---|---|
| Skewness | 0.330 | -0.01 | -0.728 | -0.19 | 1.423 |
| Std Error Skewness | 0.084 | 0.084 | 0.084 | 0.084 | 0.084 |
| z-score Skewness | 3.93 | 0.119 | -8.67 | 2.26 | 16.94 |
| Kurtosis | -0.703 | -0.7 | 0.155 | -0.299 | 0.603 |
| Std Error Kurtosis | 0.168 | 0.168 | 0.168 | 0.168 | 0.168 |
| z-score Kurtosis | -4.18 | -4.17 | 0.92 | -1.78 | 3.59 |

Per Table 6.2, there is no indication of skewness in terms of the dependent variables at the 95% level of confidence. However, both reported and observed PROPZAP indicate significant kurtosis within the data set. These measures reflect a significantly flat distribution evidenced by negative kurtosis values for both reported PROPZAP (-1.14) and observed PROPZAP (-0.85).

**Table 6.2 Skewness and Kurtosis – Dependent Metric Variables**

| | Reported PropZap | Observed PropZap |
|---|---|---|
| Skewness | -0.061 | 0.098 |
| Std Error Skewness | 0.084 | 0.084 |
| z-score Skewness | 0.7262 | 1.17 |
| Kurtosis | -1.145 | -0.856 |
| Std Error Kurtosis | 0.168 | 0.168 |
| z-score Kurtosis | 6.82 | -5.09 |

More sophisticated measures of normality including the Kolmogorov-Smimov test and the Shapiro-Wilk test per Table 6.3 confirm the lack of normality in the data set. Both of these tests indicate a non-normal distribution for all dependent and independent variables under review (p = 0.000).

**Table 6.3 Tests of Normality – Dependent Metric Variables**

| | Kolmogorov-Smirnov(a) | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| RepPROPZAP | .105 | 848 | .000 | .953 | 848 | .000 |
| ObsPROPZAP | .062 | 848 | .000 | .967 | 848 | .000 |
| Respondent Age | .301 | 848 | .000 | .737 | 848 | .000 |
| RCDEmpowerment | .050 | 848 | .000 | .992 | 848 | .000 |
| SituationalTrigger | .094 | 848 | .000 | .954 | 848 | .000 |
| AttitudeAdv | .178 | 848 | .000 | .934 | 848 | .000 |
| PerceivedClutter | .119 | 848 | .000 | .958 | 848 | .000 |

a Lilliefors Significance Correction

However, it should be noted that large samples (n > 200) give rise to significant violations even with small deviations from normality (Field, 2005, p.72). "For large samples, it is very easy to get significant results from small deviations from normality, and so a significance test doesn't necessarily tell us whether the deviation from normality is enough to bias any statistical procedures that we may apply to the data" (Field, 2005, p.93). In this case, it is more important to visually inspect the normal distribution curves. In this regard, distributions for all relevant dependent and independent variables appear normal for the data set underlying this study (Appendix 27).

### *Homogeneity of Variance*

Based on the Levene statistic, all tests for homogeneity of variance are non-significant per Table 6.4 indicating that this assumption is upheld for this data set.

**Table 6.4 Tests of Homogeniety of Variance – Predictor Variables**

| | | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| RCDEmpowerment | Based on Mean | 1.353 | 1 | 846 | .245 |
| | Based on Median | 1.248 | 1 | 846 | .264 |
| | Based on Median and with adjusted df | 1.248 | 1 | 845.829 | .264 |
| | Based on trimmed mean | 1.345 | 1 | 846 | .247 |
| SituationalTrigger | Based on Mean | .219 | 1 | 846 | .640 |
| | Based on Median | .030 | 1 | 846 | .863 |
| | Based on Median and with adjusted df | .030 | 1 | 845.662 | .863 |
| | Based on trimmed mean | .154 | 1 | 846 | .695 |
| AttitudeAdv | Based on Mean | .113 | 1 | 846 | .736 |
| | Based on Median | .075 | 1 | 846 | .784 |
| | Based on Median and with adjusted df | .075 | 1 | 834.848 | .784 |
| | Based on trimmed mean | .118 | 1 | 846 | .731 |
| PerceivedClutter | Based on Mean | .019 | 1 | 846 | .889 |
| | Based on Median | .006 | 1 | 846 | .937 |
| | Based on Median and with adjusted df | .006 | 1 | 841.848 | .937 |
| | Based on trimmed mean | .012 | 1 | 846 | .914 |

### *Interval Data*

The dependent variable is measured via respondents' estimates of what percentage of the advertising break is off-channel (Reported PROPZAP) or what percentage is observed to be off-channel (Observed PROPZAP). Since this is ratio data, the assumption of interval data is upheld for the dependent variables.

***Independence***

One viewer's zapping behaviour determines the extent of off-channel time imposed on other viewers in the room. Consequently, the nature of the study is such that viewers within the same household watching the same television screen have the identical observed time off-channel for any specific advertising break. This means that scores are dependent for multiple viewers within a single household. However, the dependence of scores is confined to viewers within the household. Since it does not apply across households, the assumption of independence is considered to be upheld.

**PROPMUTE, PROPLEAVE and PROPZAP**

It is stated in a previous section that, on each observation occasion, observers monitor the advertising breaks embedded into a period of thirty minutes of television viewing. Observations took place within 319 households, each household being monitored on four viewing occasions. Provision is made for between one and five viewers per household.

A total of 848 individual viewers were monitored on at least one observation occasion. In all, 1,283 observations took place meaning that each viewer was present for an average of 1.5 viewing occasions. The observed percentage time spent off-channel (Observed PROPZAP), muting (PROPMUTE) and leaving the room (PROPLEAVE) is captured for each individual viewer. In addition, each viewer completes a survey after the fourth and final observation session. Therefore, the final data set comprises both observational and survey data for 848 television viewers.

***The Propensity to Mute the Television Set (PROPMUTE)***

Muting the television set during advertising breaks is of secondary interest to this study. However, it serves as a qualifier for Observed PROPZAP in that if the television set is muted during advertising breaks, viewers are unlikely or less likely to switch channel.

Muting the television set accounts for only 2.126% of the total advertising time monitored. The PROPMUTE percentage ranges between 0 and 97.9% of the duration of the advertising break with a standard deviation of 7.41%.

***The Propensity to Leave the Room (PROPLEAVE)***

Leaving the room during the advertising break is also of secondary interest to this study. Once again, its inclusion into this study provides a context for observed PROPZAP. Being out-of-the-room is a distinctly identifiable behaviour and is separately measured for each individual in the study.

Clearly, someone who has left the viewing room has actively avoided the advertising break and therefore has no propensity to switch channels.

The average percentage of advertising break time that viewers spend outside the viewing room is 14.3%. The PROPLEAVE data ranges between 0% and 82.29% of the advertising break with a standard deviation of 13.9%.

***The Propensity to Zap Commercials (PROPZAP)***

It is stated in a previous section that channel switching is identified in the literature as a primary activity underlying television advertising avoidance behaviour (Danaher, 1995; Heeter & Greenberg, 1985; Kaye, 1994; Tse & Lee, 2001; Walker & Bellamy, 1993a). For purposes of this study, the propensity to zap television commercials (Observed PROPZAP) is defined as the percentage of advertising time during which the television set is tuned to channels other than the programme channel that viewers are watching.

Based on the observation component of this study, viewers are off-channel an average of 36.8% of the advertising time (Appendix 26). Moreover, observed PROPZAP percentage scores range from 0% to 97.06% with a standard deviation of 23.9%.

Together observed PROPZAP (36.8%) and PROPLEAVE (14.3%) indicate that viewers are off-channel for 51.1% of the commercial time. However, PROPZAP and PROPLEAVE are not mutually exclusive measures of advertising avoidance. For example, one or more viewers may leave the room while the remaining viewer(s) may switch the channel in their absence. Therefore, some extent of double counting is inherent in the total advertising time given to PROPZAP and PROPLEAVE. Although the extent of overlap is not measured for purposes of this study, it is likely to be relatively low. The total off-channel time as result of channel switching and leaving the room is estimated to be around 50%.

Reported PROPZAP reflects the percentage of time that viewers report to be off-channel during the advertising break. Results indicate that viewers report to miss between 0 and 100% of the advertising time with an average of 46.96% and a standard deviation of 26.98% (Appendix 26).

**Dependent Variables: Observed PROPZAP versus Reported PROPZAP**

Based on a t-test, the levels of observed PROPZAP and reported PROPZAP are significantly different (p = 0.000). However, observed PROPZAP and reported PROPZAP are significantly correlated (r = 0.28) which evidences that there is a significant association between what percentage of advertising time viewers say they miss versus the actual percentage that they do miss based on between one and four observation sessions (Table 6.5).

**Table 6.5 Correlation between Reported and Observed PROPZAP**

| | | N | Correlation | Sig. |
|---|---|---|---|---|
| Pair 1 | RepPROPZAP & ObsPROPZAP | 848 | .280 | .000 |

A previous study has suggested that viewers dramatically underreport their channel switching. Kaye (1994) reported that, on average, viewers switch channels almost ten times more (44.2 actual switches compared to 4.8 reported switches per hour) than they reported (Kaye, 1994, p.120). In this study, the key measure is the percentage of advertising time missed rather than the number of channel switches. However, in the present study, there is no evidence of a dramatic difference between observed and reported off-channel time during advertising breaks. The significant correlation (r = 0.28) between observed and reported off-channel time suggests that viewers' reports are broadly in line with their observed channel switching.

## The Predictors of Observed PROPZAP

This section of the study focuses on identifying the predictors of observed PROPZAP. Channel switching is monitored over four in-home observation sessions followed by a self-completion survey designed to reveal viewer circumstances, attitudes and perceptions. Multiple regression is employed to determine the relative impact of the six identified predictor variables on channel switching.

### *Multiple Regression and Sample Size*

Multiple regression requires that the sample size comprises at least 15 respondents per predictor (Field, 2005, p.161) or ideally 20 respondents per predictor in the case of hierarchical regression (Coakes, 2005, p.169). Green (1990, cited in Field, 2005, p.173) recommends that, in order to test the individual predictors in a regression model, a minimum sample size being the larger of 104 + k or 50 + 8k (where k is the number of predictors included in the model) is required. Moreover, Miles and Shevlin (2001, cited in Field, 2005, p. 173) propose that for six predictors, 50 cases are required to detect a large effect, 100 cases for a medium effect and in excess of 600 cases for a small effect. In this study comprising 848 cases, there is adequate sample size to detect small effects.

### *Recoding Dichotomous Variables Included in the Regression Model*

A regression model may include predictor variables that are categorical (Field, 2005, p.208) and can include two or more categories. For variables with only two categories (dichotomous variables), the recoding procedure is relatively simple. The categories should be recoded with values of 0 and 1. In this study, there are two dichotomous variables – access to cable / no access to cable television and planned / impulse viewing. For channel proliferation (access to cable television), viewers with cable are coded as “0” while viewers without cable are coded as “1”. Similarly, viewers who planned to watch the

television programme in observation 4 are coded as “0” while those who did not plan to watch are coded as “1”.

***Independent and Dependent Variables for Observed PROPZAP***

The regression analysis for Observed PROPZAP contains the input of data as shown in Table 6.6.

**Table 6.6 Variables included in the analysis of Observed PROPZAP**

| **Independent (Predictor) Variables** | **Dependent (Outcome) Variable** |
|---|---|
| Perceived Clutter<br>Channel Proliferation (Cable access / No cable access)<br>Attitude to TV Advertising<br>Advertising Triggers<br>RCD empowerment<br>Age<br>Gender | Observed PROPZAP (The observed propensity to zap TV commercials). |

In this regard, note the following:

1. Although ‘age’ and ‘gender’ have been identified as background variables, they are included into the multiple regression analysis to determine their potential influence on observed PROPZAP.
2. Planned versus impulse viewing are not included in this regression analysis since the data collected against these variables apply only to observation 4. Therefore, a separate analysis will be conducted to determine the influence of viewer planning on observed PROPZAP.
3. The influence of ‘genre’ on channel switching is separately evaluated using ANOVA.

***Correlations among the Predictor Variables for Observed PROPZAP***

The first stage of analysis is based on the regression of the identified predictor variables on observed PROPZAP. The correlation matrix (Appendix 28) shows that three predictor variables correlate significantly with observed PROPZAP (RCD empowerment, respondent age and advertising triggers). RCD empowerment (r = 0.257) and advertising triggers (r = 0.162) are positively correlated with observed PROPZAP, while respondent age is negatively correlated (r = -0.164).

Among these significantly correlated variables, age is significantly negatively correlated with both RCD empowerment (r = -0.263) and with advertising triggers (r = -0.13). Moreover, RCD empowerment and advertising triggers are significantly positively correlated (r = 0.636). Since these latter predictor variables are factors derived from an orthogonal rotation, this correlation is seemingly higher than expected and tests for multicollinearity between these variables will be conducted and scrutinized. This is critical to the analysis since regression is based on the assumption that the predictor variables are uncorrelated among themselves (Churchill & Iacobucci, 2002, p.738). The amount of information about the effect of each predictor variable on the dependent variable declines as multicollinearity increases (Churchill & Iacobucci, 2002, p.740) and very little meaning can be ascribed to the coefficients of partial regression when mulitcollinearity is present. Moreover, high levels of multicollinearity "increase the probability that a good predictor of the outcome will be found non-significant and will be rejected from the model" (Field, 2005, p.174).

However, it should be noted in the present study that there is no evidence of substantial correlations (r > 0.9) and therefore there is no preliminary indication of multicollinearity in the data set (Field, 2005, p.185).

***Multiple Regression Analysis for the Predictor Variables on Observed PROPZAP***

The regression model is a significantly better predictor of the outcome variable than the mean (F = 10.41). However, only 8.6% of the variation in observed PROPZAP is explained by the predictor variables. Two factors make a significant contribution to the model. RCD empowerment is the most important factor (t = 5.12) followed by age (t = -2.7).

**Table 6.7 Regression of Observed PROPZAP against all Significant Predictors**

| *Variable* | *Parameter estimate (Beta Values)* | *Standard Error* | *Stdized parameter* | *t-statistic* | *p-value* |
|---|---|---|---|---|---|
| Intercept | 26.24 | 6.08 | | 4.32 | .000 |
| RCD Empowerment | 4.476 | 0.874 | 0.226 | 5.12 | .000 |
| Age | -0.188 | 0.07 | -0.096 | -2.7 | .007 |

*Sample size = 848; R-squared = 0.086; Adjusted R-squared = 0.072*

The extent of variation in observed PROPZAP explained by the predictor variables is disappointing. However, it is consistent with Danaher (1995) in which only 9% of the variation in PROPVIEW (PROPVIEW = 100 - PROPZAP) was accounted for by personal and household demographics.

It is notable that potential predictors such as attitude to advertising, access to cable television and perceived clutter levels play no significant role in influencing the observed propensity to zap television commercials.

The results confirm the two most important factors influencing the propensity to zap commercials, namely RCD access and viewer age. These factors were most significant in the Danaher (1995) study although their relative importance has been reversed in this study. Whereas in the Danaher (1995) study, age was the most important factor (t = 2.9) followed by 'presence of remote

control' (t = 2.1), this study allocates more importance to RCD empowerment (t = 5.12) followed by age (t = -2.7). The increase in the influence of the remote control device may be ascribed to the different ways in which this variable is interpreted. In the Danaher (1995) study, RCD presence referred to whether the household had access to a remote control device (73% of households had access). However, in the present study, 316 of the 319 households (99 %) have RCD access. In this study, the focus is on the empowerment that viewers derive from the RCD rather than whether a remote is available to the household.

The direction of the age factor is consistent in both studies. Age is positively related to the propensity to view the programme channel during advertising breaks (PROPVIEW) but negatively related to the propensity to switch channels during the advertising breaks (PROPZAP). In both cases, the older the viewer, the more likely they are to remain tuned to the programme channel during advertising breaks.

These results confirm Danaher's (1995) contention that there appears to be no apparent systematic reason why people switch channels during commercial breaks. This supports the notion the channel switching is a random process. However, despite its random nature, there is a remarkable consistency in the overall extent of channel switching.

PROPZAP remains consistent across the four observation sessions. Average observed PROPZAP is 38.06% while the mean PROPZAP per observation session closely resembles the overall average. Table 6.8 reflects the mean PROPZAP for each observation session.

**Table 6.8 Mean Observed PROPZAP by Observation Session**

| | **Observation 1** | **Observation 2** | **Observation 3** | **Observation 4** |
|---|---|---|---|---|
| Mean | 38.24% | 37.74% | 38.1% | 38.16% |
| Std Deviation | 27.67% | 28.54% | 29.05% | 27.73% |

**Assessing Multicollinearity for the Observed PROPZAP Regression Model**

There are no indications of multicollinearity for the observed propzap data set. All Variance Inflation Factors (VIF's) are well below 10. The average VIF is 1.306 which is not substantially greater than the desired level of 1 (Field, 2005, p.196). Moreover, tolerance levels are all greater than 0.2, indicating no multicollinearity concerns for the multiple regression model (Appendix 28).

**Outliers and Influential Cases**

Based on the characteristics of the normal distribution curve, it is expected that 5% of cases lie outside of +/- 2 standard deviations (Field, 2005p. 199). For the data set under consideration, 19 out of 848 cases (2.24%) fall outside of these limits. Although there is no obvious concern over this percentage, a diagnostic of cases summaries is performed to check for outliers and influential cases (Appendix 29).

Given that there are no cases with a Cook's distance greater than 1, this suggests that no cases have an undue influence on the model (Field, 2005, p.200). Moreover, all centered leverage values fall within three times 0.0082 (k + 1 / n = 7/848 = 0.0082) except for case 430 which lies on the boundary of the acceptable limit. Finally, the mahalanobis indicator poses no outlier concerns. For large samples (n = 500) with five predictor variables, mahalanobis values in excess of 25 are considered problematic. The data in appendix 29 confirm that the highest mahalanobis value is 20.91 (case 430).

Overall, there is insufficient evidence to exclude any outliers and all cases are retained for purpose of the analysis.

**Checking Assumptions for Multiple Regression Analysis for Observed PROPZAP**

***The Assumption of Independent Errors***

The Durbin-Watson test provides a measure of the extent to which residual terms are uncorrelated (Field, 2005, p.170) for any two observations. A Durbin-Watson measure of 2 indicates support for the assumption of independent errors. As a rule of thumb, Durbin-Watson values below 1 and above 3 are cause for concern. For this analysis, the Durbin-Watson value is 1.002 (Appendix 28) which falls into the acceptable range and indicates a positive correlation between adjacent residuals. Therefore, the assumption of independent errors is upheld.

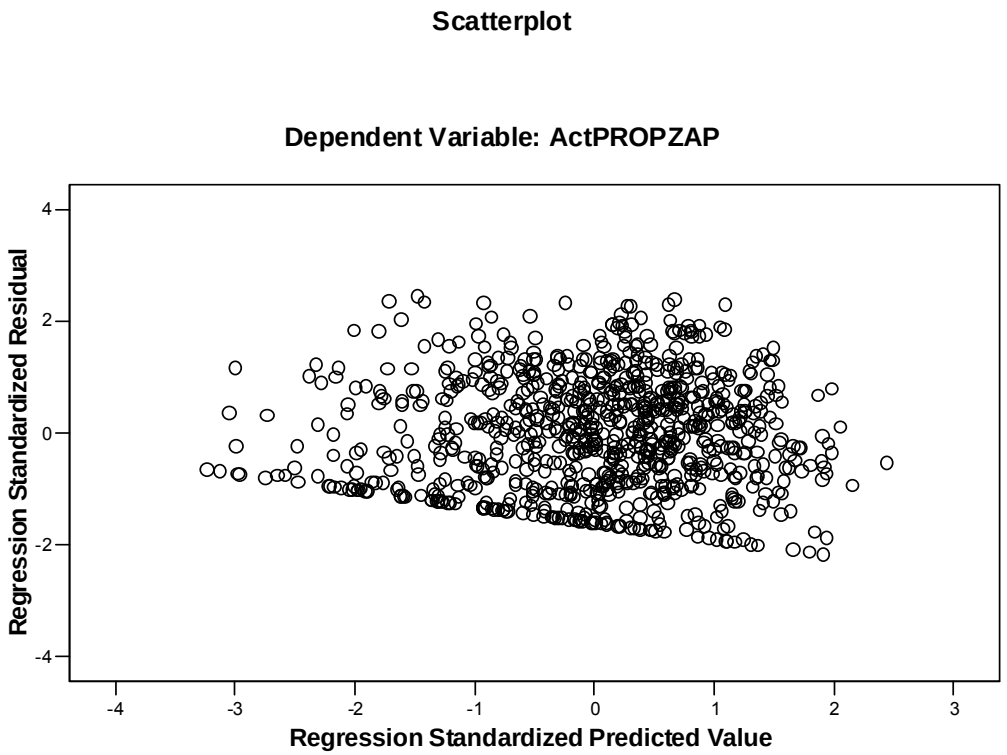
***The Assumption of Homoscedasticity and Linearity***

In order to test for possible violation of the assumption of homoscedasticity, the normal probability plot for the residuals of ZRESID and ZPRED are plotted (Field, 2005, p.202). Ideally, the plot should resemble an array of random dots evenly dispersed around zero. A funnel-like pattern indicates that there may be evidence of heteroscedasticity in the data.

Linearity is an underlying assumption for Multiple Regression analysis which is underpinned by a linear relationship among variables (Coakes, 2005, p.169). Once again, the residual plot for ZRESID versus ZPRED offers insight into the potential violation of this assumption. If the scatter is random and non-directional, this confirms that the assumption has been met. Any non-linear pattern or flow indicates a curvilinear trend within the data (Field, 2005, p.203).

From the scatterplot in Figure 6.1, there is no evidence of a non-linear trend. Morevoer, the dots do not become more or less spread out over the graph, thus preserving the assumption of homoscedascity.

**Figure 6.1 Scatterplot of Dependent Variable: Observed PROPZAP**

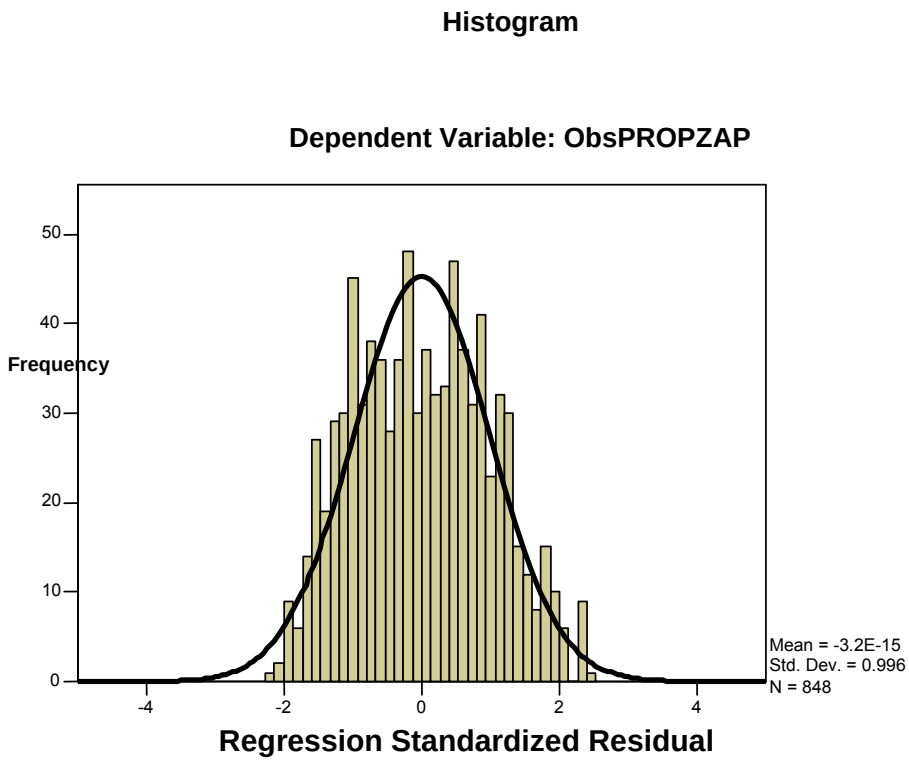



Partial plots generated for all non-categorical predictors (Appendix 31) provide further evidence of random scatter patterns with no 'funneling' effects and therefore no indication of heteroscedascity.

### *Assumption of Normality of Residuals*

This assumption is tested via a histogram that is assessed in terms of how it conforms to a normal distribution. A skew histogram and underlying curve violates the assumption of normality (Field, 2005, p.204). It is evident from the histogram of the standardized residuals in Figure 6.2 that the assumption of normality is supported.

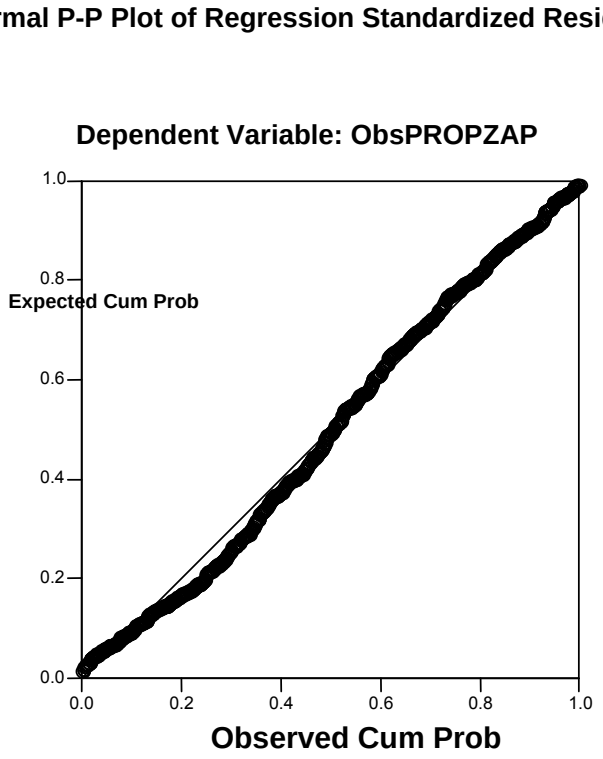
**Figure 6.2 Histogram for Dependent Variable: Observed PROPZAP**




Moreover, the normal probability plot (Figure 6.3) provides additional support for the assumption of normality. The straight line in this plot represents a normal distribution (Field, 2005, p.204). If the scatter plot closely follows the straight-line definition, then this further supports the assumption of normality. However, the more distant the scatter points are from the straight line, the greater the skew inherent in the data.

It is apparent from the normal probability plot in Figure 6.3 that the assumption of normality is upheld for purposes of the data under review.

**Figure 6.3 Normal Probability Plot for Dependent Variable: Observed PROPZAP**



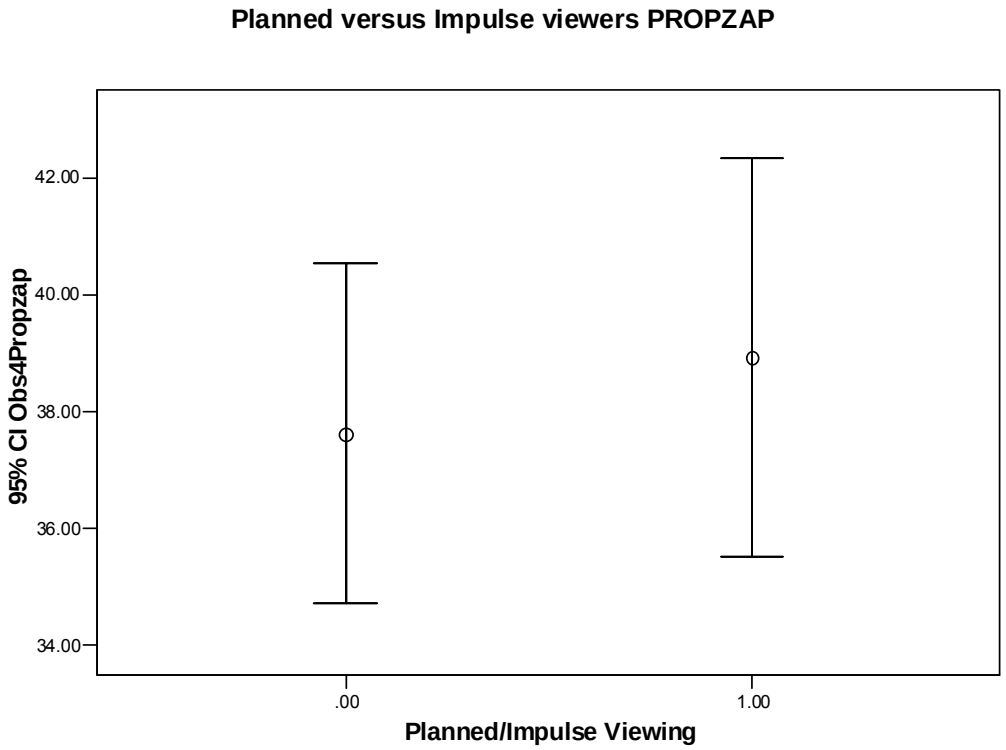

## Planned versus Impulse Viewing

The percentage of time spent off-channel during ad breaks (Observed PROPZAP) is hypothesized to be higher for impulse viewers compared to viewers who plan to watch a particular programme. In order to test this contention, viewers were required to complete Section A of the survey immediately after Observation 4 took place. Included in Section A is a question (Question 4) that requires the viewer to note whether he or she planned to watch that particular programme (Appendix 23). Those who answered 'yes' are categorized as "planned viewers' whereas those who answered 'no' are classified as 'impulse viewers'.

Observed PROPZAP data drawn from Observation 4 is compared for those viewers who planned to watch versus those who watched on impulse. As

expected, the error bar graph (Figure 6.4) shows that, on average, planned viewers spend less time off-channel during advertising breaks than impulse viewers. However, the considerable overlap between the error bars indicates that the samples are unlikely to originate from two different populations (Field, 2005, p.279).

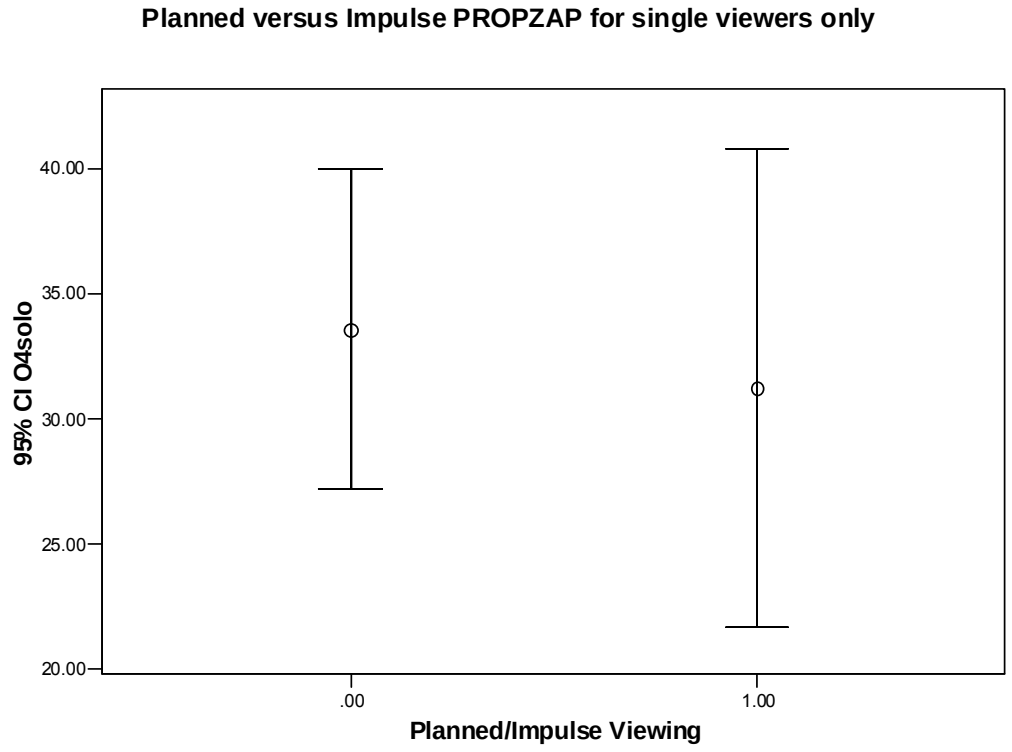
**Figure 6.4 Planned Versus Impulse Viewers against Observed PROPZAP**




However, there is a limiting factor inherent in the Observed PROPZAP data. If a group of viewers happens to be watching a television programme, they will by definition have the same PROPZAP profile during the advertising breaks since they are all watching the same screen. However, it may be that some household members planned to watch the programme whereas others watched on impulse. In this instance, both planned and impulse viewers within the same programme context will have exactly the same time spent off-channel (Observed PROPZAP) during the ad breaks. Clearly, this situation will convolute the validity of the analysis outcome.

A solution to this problem is to isolate and analyse the 'single-viewer' in observation 4 and exclude all multiple viewer observations from the analysis. This guarantees that the cases are independent and thus satisfies the underlying assumption that scores are independent because they come from different viewers (Field, 2005, p.287). In this case, an interesting reversal of average off-channel time emerges per the error bar graph in Figure 6.5.

**Figure 6.5 Planned Versus Impulse PROPZAP for Single Viewers**




Surprisingly, those viewers who planned to watch spend more time off-channel on average during the advertising breaks compared to those watching on impulse. However, the impulse viewers evidence greater levels of variation in their off-channel behaviour. The groups are clearly from the same population as indicated by the overlapping error bar graphs.

The t-test for independent groups indicates that single planned viewers spend a greater proportion of the advertising break off-channel (M = 33.56, SE = 3.2)

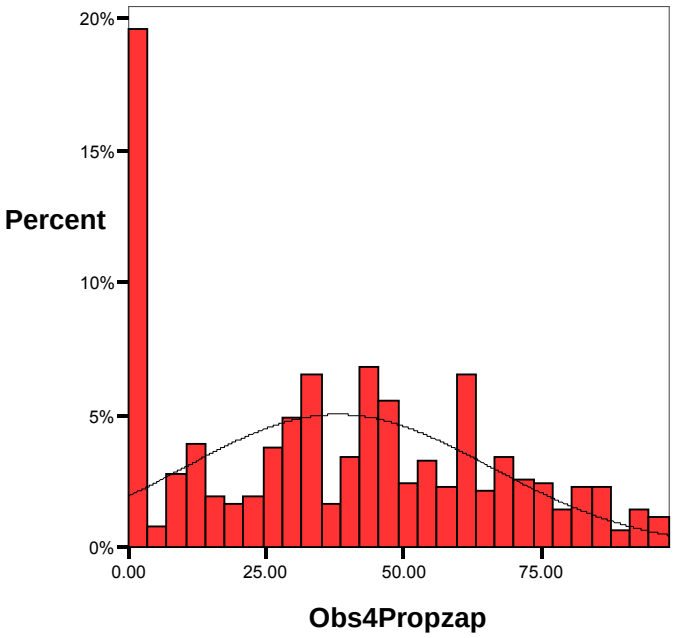
compared to impulse viewers (M = 31.22; SE = 4.727). This difference was not significant [t(121) = 0.423, p> .05] and it represents a small effect (r = 0.0384) per appendix 33.

## Testing for Underlying Assumptions

### *Normally Distributed Data*

As a parametric test, the t-test is subject to the data originating from a normally distributed population. The PROPZAP scores for Observation 4 are shown in Figure 6.6.

**Figure 6.6 Distribution of PROPZAP for Observation 4**




Based on Table 6.9, the Kolmogorov-Smirnov and Shapiro-Wilk tests are both significant (p<0.05) indicating that the distribution is significantly non-normal.

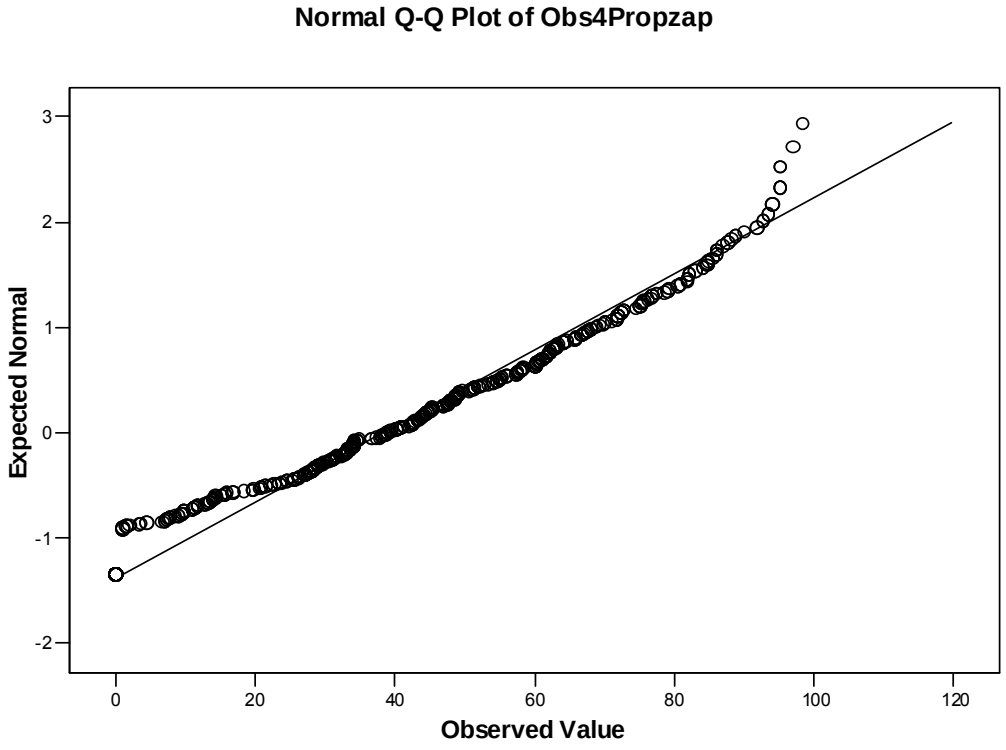
**Table 6.9 Kolmogorov-Smimov and Shapiro-Wilk Tests of Normality**

| | Kolmogorov-Smirnov(a) | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | Df | Sig. | Statistic | Df | Sig. |
| Obs4Propzap | .098 | 611 | .000 | .944 | 611 | .000 |

a Lilliefors Significance Correction

This is confirmed by the deviation of the observed values from the expected values in the Q-Q plot for O4PROPZAP (Figure 6.7).

**Figure 6.7 Normal Q-Q Plot of Observed PROPZAP for Observation Session 4**




***Homogeneity of Variance***

Per Table 6.10, the Levene test indicates that the variances are not significantly different ($p > 0.05$) meaning that the assumption of homogeneity of variance has been upheld.

**Table 6.10 Levene Test of Homogeneity of Variance**

| | | Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| Obs4Propzap | Based on Mean | 1.467 | 1 | 609 | .226 |
| | Based on Median | 1.472 | 1 | 609 | .226 |
| | Based on Median and with adjusted df | 1.472 | 1 | 605.081 | .226 |
| | Based on trimmed mean | 1.408 | 1 | 609 | .236 |

**Observed PROPZAP Based on Genre**

Genre is presented as a background variable for purposes of this study. It is included in order to establish any links between genre and channel switching for further examination in future studies.

Firstly, it should be noted that per Table 6.11, the sample size is dissimilar for each genre.

**Table 6.11 Sample Size of Respondents for each Genre**

| Genre | Sample size |
|---|---|
| Movies | 209 |
| News | 419 |
| Quiz | 184 |
| Sitcom | 182 |
| Other | 289 |

Unequal sample sizes indicate that ANOVA is not robust to violations of homogeneity of variance (Field, 2005, p.324). The Levene test confirms that the variances are significantly different (p = 0.000) per Table 6.12.

**Table 6.12 Test of Homegeniety of Variances for Genre Selections**

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 5.051 | 4 | 1278 | .000 |

Even when the dependent variable data are transformed (Table 6.13) using square roots (Field, 2005, p.350), the Levene statistic remains significant (p = 0.004).

**Table 6.13 Test of Homegeniety of Variances for Genre Selections – Transformed Data**

SqRtObsPROPZAP

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 3.853 | 4 | 1278 | .004 |

As a result of the violation of the assumption of homogeneity of variance, the Welch F is applied (Field, 2005, p. 350) to provide a robust measure for the influence of genre on observed PROPZAP (Table 6.14).

**Table 6.14 Welch F Applied to Genre**

| | Statistic(a) | df1 | df2 | Sig. |
|---|---|---|---|---|
| Welch | 5.985 | 4 | 539.211 | .000 |
| Brown-Forsythe | 5.946 | 4 | 1040.291 | .000 |

a Asymptotically F distributed.

The Welch F confirms that there is a significant effect for genre in terms of the percentage time spent off-channel during the commercial breaks.
Given that sample sizes are dissimilar, Gabriel's procedure (for somewhat different sample sizes) and Hochberg's GT2 (for very different sample sizes are applied (Field, 2005, p. 341).

Both the Gabriel and the Hochberg procedures indicate that no significant differences in PROPZAP levels exist among News, Movies, Sitcoms and Quiz shows (Appendix 36). However, there is a significant difference between the PROPZAP levels for the four selected genres and the PROPZAP level for all other programmes. More specifically, there are clearly significantly higher levels for PROPZAP for News, Movies, Sitcoms and Quiz shows compared to other programme genres. Based on these results, it may be concluded that

Quiz shows, Sitcoms, Movies and News programmes are less likely to retain their audiences during advertising breaks relative to other programme options

Table 6.15 shows subsets of groups that have the same means. The Gabriel and Hochberg tests have both created two subsets of groups with statistically similar means. The first group comprises 'other programmes' and 'news'. However, since 'news' appears in the second subset as well, it associates relatively well with both groups and no clear significant difference can be ascertained. However, there is a clear significant difference between the mutually exclusive components in each subset. In other words, Movies, Sitcoms and Quiz Shows have statistically similar means that are significantly different from 'Other' programme genres.

**Table 6.15 Gabriel and Hochberg Test of Means**

| | | | Subset for alpha = .05 | |
|---|---|---|---|---|
| | Genre | N | 1 | 2 |
| Gabriel(a, b) | Other | 289 | 29.9036 | |
| | News | 419 | 36.2443 | 36.2443 |
| | Movies | 209 | | 39.1012 |
| | Sitcom | 182 | | 40.2738 |
| | Quiz | 184 | | 40.6355 |
| | Sig. | | .150 | .633 |
| Hochberg(a,b) | Other | 289 | 29.9036 | |
| | News | 419 | 36.2443 | 36.2443 |
| | Movies | 209 | | 39.1012 |
| | Sitcom | 182 | | 40.2738 |
| | Quiz | 184 | | 40.6355 |
| | Sig. | | .150 | .633 |

Means for groups in homogeneous subsets are displayed.
a Uses Harmonic Mean Sample Size = 231.902.
b The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

Contrary to Danaher's (1995) results in which quiz shows tend to perform best in retaining their audiences, in this study quiz shows are associated with the highest levels of off-channel time during ad breaks (40.63%). Movies are least likely to retain their audiences in the Danaher (1995) study. The current study partially supports this contention in that a relatively high level of off-channel time (39.1%) is associated with Movies. Sitcoms and News were

moderately effective in retaining their audiences in the Danaher (1995) study. However, in the present study, Sitcoms reflect relatively high levels of off-programme activity (40,27%) while news programmes are the best of the four genres at retaining their audiences evidenced by the lowest PROPZAP percentage (36.24%). Notably, the channel switching during programmes other than the four selected genres (29.9%) is the lowest of all the genres tested.

**Table 6.16 Comparison between ADRATIO and PROPZAP Percentages**

| Programme type | ADRATIO | PROPZAP | PROPZAP expressed in terms of ADRATIO |
|---|---|---|---|
| Movies | 89.6 | 39.1% | 60.9% |
| Drama | 94.3 | | |
| Sports | 94.4 | | |
| Comedy | 94.5 | 40.27% | 59.73% |
| News/Documentary | 95.1 | 36.24% | 63.76% |
| Soaps | 95.5 | | |
| Game/Quiz shows | 101.4 ** | 40.63% | 59.37% |

** Game shows not only retain their own audience but also attract 'grazers' from other channels.

It is clear from Table 6.16 that advertising audience ratings in the present study are far lower than in the Danaher (1995) study. This may be explained by the time lapse between studies wherein viewers are more likely to switch channels during the advertising breaks than they were ten years ago. Another variation is in the number of channel options with Australian homes having five free-to-air channels (and some with cable access) available compared to three channels in Danaher's (1995) New Zealand based study.

**Multiple Regression Analysis for Reported PROPZAP**

***Independent and Dependent Variables for Reported PROPZAP***

The regression analysis for Reported PROPZAP includes the independent and dependent variable listed in Table 6.17.

**Table 6.17 List of Dependent and Independent Variables for Reported PROPZAP**

| Independent (Predictor) variable | Dependent (Outcome) Variable |
|---|---|
| Perceived Clutter<br>Channel Proliferation (Cable access / No cable access)<br>Attitude to TV Advertising<br>Advertising Triggers<br>RCD empowerment<br>Age<br>Gender | Reported PROPZAP (The reported propensity to zap TV commercials). |

In this regard, note the following:

1. Although 'age' and 'gender' have been identified as background variables, they are included into the multiple regression analysis to determine their possible influence on reported PROPZAP.

2. Planned versus impulse viewing is not included in this regression analysis since the data collected against this variable can only be applied to Observed PROPZAP.

### *Correlation among the Predictor Variables for Reported PROPZAP*

The correlation matrix (Appendix 34) shows that four variables correlate significantly with reported PROPZAP (perceived clutter, RCD empowerment, advertising triggers and respondent age). RCD empowerment (r = 0.381), advertising triggers (r = 0.36) and perceived clutter (r = 0.187) are positively correlated with reported PROPZAP, while respondent age is negatively correlated (r = -0.102).

Among these significant predictor variables, age is significantly negatively correlated with both RCD empowerment (r = -0.263) and with advertising triggers (r = -0.13) but is positively related to perceived clutter (r = 0.152). RCD empowerment and advertising triggers are significantly positively correlated (r = 0.636). Perceived clutter is significantly positively correlated to both RCD empowerment (r = 0.123) and advertising triggers (r = 0.247).

Once again, there is no evidence of substantial correlations (r > 0.9) and therefore there is no preliminary indication of multicollinearity in the data set (Field, 2005, p.185).

### *Multiple Regression Analysis for the Predictor Variables on Reported PROPZAP*

The regression model is a significantly better predictor of the outcome variable than the mean (F = 27.071). Notably, 18.4% of the variation in reported PROPZAP is explained by the predictor variables. Three predictor variables make a significant contribution to reported PROPZAP. RCD empowerment is the most important factor (t = 5.996), followed by advertising triggers (t = 4.042) and perceived clutter (t = 3.604).

**Table 6.18 Regression of Reported PROPZAP against all Significant Predictors**

| *Variable* | *Parameter estimate (Beta Values)* | *Standard Error* | *Stdized parameter* | *t-statistic* | *p-value* |
|---|---|---|---|---|---|
| Intercept | 2.832 | 6.822 | | 0.415 | .678 |
| RCD Empowerment | 5.574 | 0.93 | 0.249 | 5.996 | .000 |
| Advertising Triggers | 3.272 | 0.809 | 0.167 | 4.042 | .000 |
| Perceived Clutter | 0.293 | 0.081 | 0.125 | 3.604 | .000 |

*Sample size = 848; R-squared = 0.184 Adjusted R-squared = 0.177*

As was the case for observed PROPZAP, relatively little variation in reported PROPZAP is explained by the predictor variables. The absence of key predictors including 'attitude to advertising' and 'access to cable television' is consistent with the results obtained for observed PROPZAP. However, two new factors – advertising triggers and perceived clutter – do emerge as significant for reported PROPZAP despite that they were non-significant variables for observed PROPZAP.

Despite that previous studies found an association between reported channel switching behaviour and predictors such as channels available (Abernethy, 1991), gender (Greene, 1988; Heeter & Greenberg, 1985) and age (Speck & Elliott, 1997), these results do not support such findings. Speck and Elliot (1997) also found a significant association between advertising avoidance and attitudes towards advertising. There is no support for this contention in this study although it should be noted that this study's focus is on channel switching while the Speck and Elliot (1997) study was based on advertising avoidance.

Once again, the low R-squared level for this analysis supports the notion that channel switching is a non-systematic process that is randomly executed (Danaher, 1995).

**Assessing Multicollinearity for the Reported PROPZAP Regression Model**

All Variance Inflation Factors (VIF's) are well below 10 and the average VIF is 1.306 which is not substantially greater than the ideal upper limit of 1 (Field, 2005, p.196). Moreover, tolerance levels are all greater than 0.2 which indicates no multicollinearity concerns for the multiple regression model (Appendix 34).

**Outliers and Influential Cases**

Based on the characteristics of the normal distribution curve, it is expected that 5% of cases would lie outside of +/- 2 standard deviations (Field, 2005p. 199). For the data set under consideration, 24 out of 848 cases (2.8%) fall outside of these limits. Although there is no obvious concern over this percentage, a diagnostic of cases summaries is performed to check for outliers and influential cases (Appendix 30).

Since there are no cases with a Cook's distance greater than 1, this suggests that none of the cases have an undue influence on the data set (Field, 2005, p.200). Moreover, all centered leverage values fall within three times 0.0082 (k + 1 / n = 7/848 = 0.0082) except for case 399 which lies on the boundary of the acceptable limit. Finally, the mahalanobis indicator poses no outlier concerns. For large samples (n = 500) with five predictor variables, mahalanobis values in excess of 25 are considered problematic. The data (Appendix 30) show that the highest mahalanobis value is 20.88 (case 399).

Overall, there is insufficient evidence to exclude any outliers and consequently all cases are retained for purpose of the analysis.

## Checking Assumptions for Reported PROPZAP

### *The Assumption of Independent Errors*

The Durbin-Watson test provides a measure of the extent to which residual terms are uncorrelated (Field, 2005, p.170) for any two observations. A Durbin-Watson measure of 2 indicates support for the assumption of independent errors. As a rule of thumb, Durbin-Watson values below 1 and above 3 are cause for concern. For this analysis, the Durbin-Watson value is 1.667 (Appendix 32), indicating a moderate positive correlation between adjacent residuals. However, as this measure falls above 1, the assumption of independent errors is upheld.

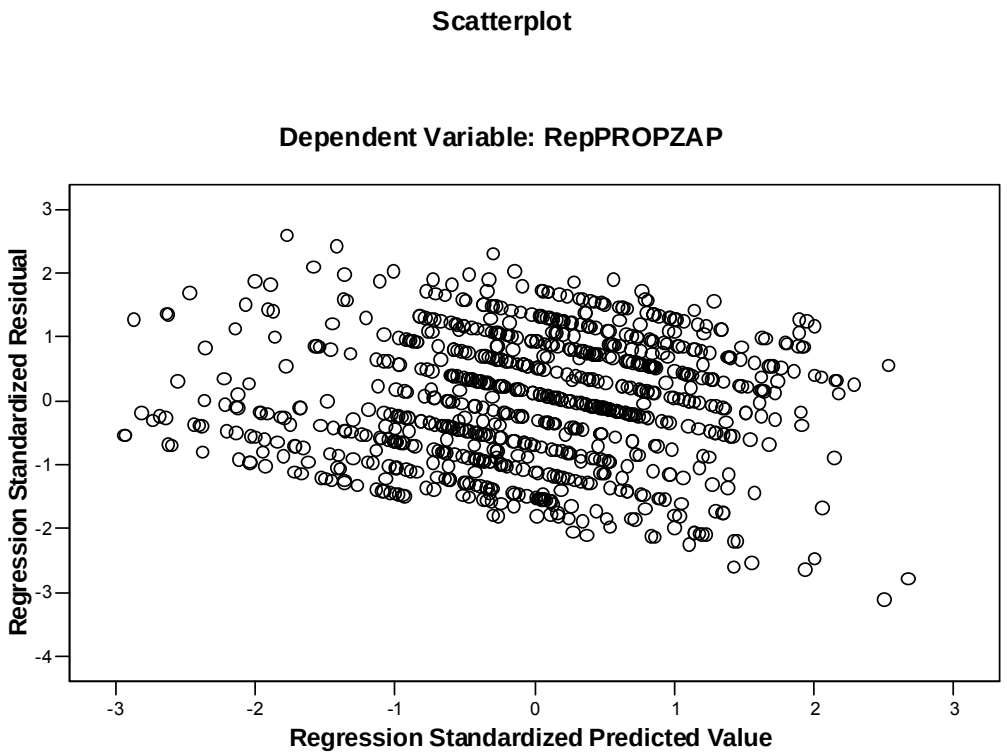
### *The assumption of Homoscedasticity and Linearity*

In order to test for possible violation of the assumption of homoscedasticity, the normal probability plot for the residuals of ZRESID and ZPRED are plotted (Field, 2005, p.202). Ideally, the plot should resemble an array of random dots evenly dispersed around zero. A funnel-like pattern indicates that there may be heteroscedasticity in the data.

Linearity is an underlying assumption for Multiple Regression analysis which is requires a linear relationship among variables. Once again, the residual plot for ZRESID versus ZPRED offers insight into the potential violation of this assumption. Random and non-directional scatter confirms that the assumption has been met. Any non-linear pattern or flow indicates a curvilinear trend within the data (Field, 2005, p.203).

From the scatterplot in Figure 6.8, there is no evidence of a non-linear trend. Moreover, the dots do not become more or less spread out over the graph, thus preserving the assumption of homoscedascity.

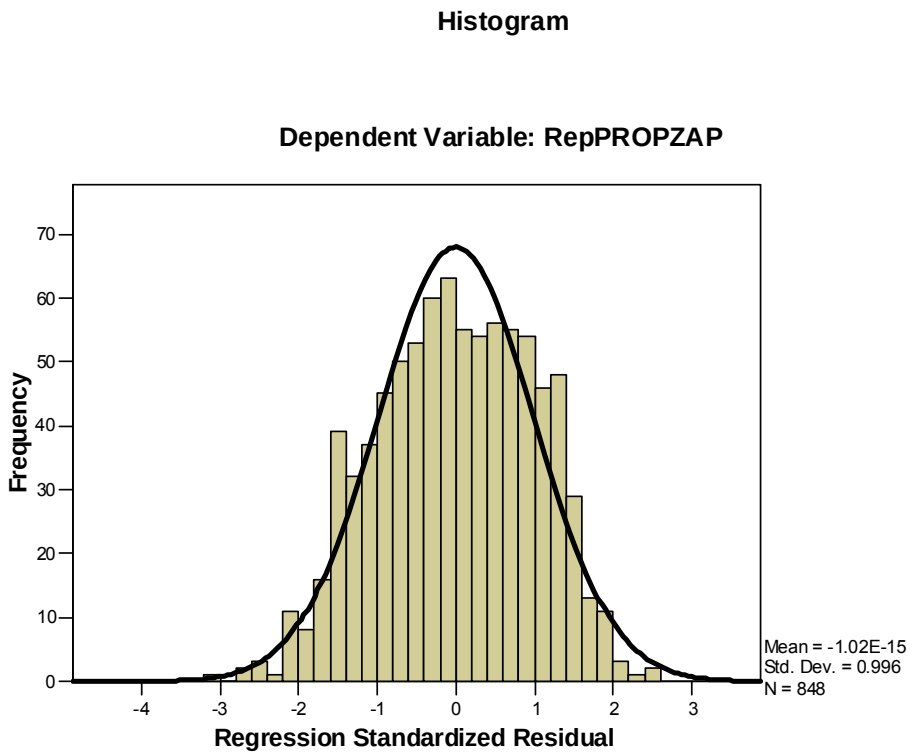
**Figure 6.8 Scatterplot for Dependent Variable: Reported PROPZAP**




***Assumption of Normality of Residuals***

This assumption is tested via a histogram that is assessed in terms of how it conforms to a normal distribution. A skew histogram and underlying curve violates the assumption of normality. It is evident from the histogram of the standardized residuals in Figure 6.9 that the assumption of normality is supported.

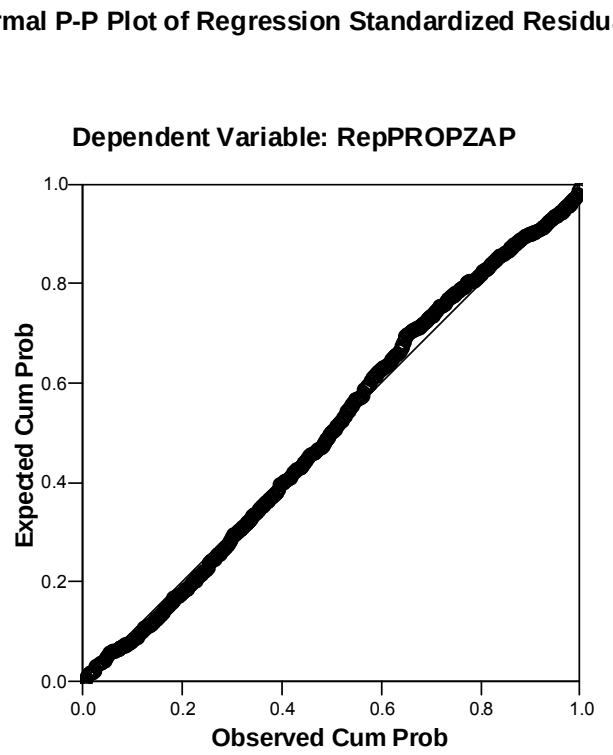
**Figure 6.9 Histogram for Dependent Variable: Reported PROPZAP**




The normal probability plot provides additional support for the assumption of normality. The straight line in this plot represents a normal distribution (Field, 2005, p.204). If the scatter plot closely follows the straight-line definition, then this further supports the assumption of normality. However, the more distant the scatter points are from the straight line, the greater the skew inherent in the data.

It is apparent from the normal probability plot in Figure 6.10 that the assumption of normality is upheld for purposes of the data under review.

**Figure 6.10 Normal P-P Plot of Regression Standardized Residual**



## Evaluation of Results in Relation to Stated Hypotheses

The predictors of observed and reported PROPZAP have been identified in the preceding discussion. These results apply against the hypotheses stated in Chapter 4.

### *Hypothesis 1a – Perceived Clutter as a Predictor of Observed PROPZAP*

Hypothesis 1a states that perceived clutter is a significant predictor of observed propensity to zap commercials. This hypothesis is not supported in that perceived clutter is not significantly associated with observed PROPZAP.

### *Hypothesis 1b – Perceived Clutter as a Predictor of Reported PROPZAP*

Hypothesis 1b states that perceived clutter is a significant predictor of reported propensity to zap commercials. This hypothesis is supported in that perceived clutter is significantly associated with reported PROPZAP. It appears that those viewers who perceive that there are too many ads on television and are irritated by the clutter are more likely to report higher levels of off-channel activity during the commercial breaks. This result is consistent with findings by Speck and Elliott (1998) and Chang-Hoan and Hongsik (2004).

However, viewers' observed channel switching (based on between 1 and 4 observed sessions) is not associated with their perception of clutter. A possible explanation for the lack of significant association between perceived clutter and observed PROPZAP is that household viewers in a group situation are 'hostage' to the zapping behaviour of the person in control of the RCD at the time. Reported commercial zapping behaviour may not translate into observed channel switching patterns when that individual does not have control over the RCD.

***Hypothesis 2a – Channel Proliferation as a Predictor of Observed PROPZAP***

Hypothesis 2a states that channel proliferation is a significant predictor of observed propensity to zap commercials. This hypothesis is not supported in that channel proliferation is not significantly associated with observed PROPZAP.

***Hypothesis 2b – Channel Proliferation as a Predictor of Reported PROPZAP***

Hypothesis 2b states that channel proliferation is a significant predictor of reported propensity to zap commercials. This hypothesis is not supported in that channel proliferation is not significantly associated with reported PROPZAP.

Based on the study results, the presence of cable television services (Foxtel) in the household does not influence either observed or reported channel switching. Therefore, access to a greater number of channels does not translate into viewers spending a disproportionately greater amount of time off-channel during the advertising breaks. This is contrary to the findings of Heeter and Greenberg (1985) and Abernethy (1991) who found that more channels are associated with higher levels of zapping. Also, Speck and Elliot (1997) found that viewers of many channels are more likely to zap.

***Hypothesis 3 – Attitude towards TV Advertising as a Predictor of Reported PROPZAP***

Hypothesis 3 states that Attitudes towards TV advertising is a significant predictor of reported propensity to zap commercials. Viewers with negative attitudes towards television advertising have a higher propensity to zap commercials. This hypothesis is not supported in that attitudes towards advertising are not significantly associated with reported PROPZAP.

Viewers with negative attitudes towards television advertising do not display a greater propensity to be off-channel during the advertising breaks. This result indicates that zapping commercials is not likely to be a response to a negative view of television advertising. Rather, channel switching appears to be an impulse or 'knee-jerk' response to explore off-channel options when the ad break comes on irrespective of underlying attitudes to television advertising.

This result is contrary to other studies which propose that 'attitudes towards advertising' is among the most influential indicators of advertising avoidance (Speck & Elliott, 1997) and is linked to higher levels of channel switching (Perse, 1990). In addition, the result obtained from this study fails to confirm Lee and Lumpkin's (1992) findings suggesting that heavy TVC avoiders are more negative towards advertising than light and moderate avoiders in terms of advertising's usefulness and information content.

However, there are reports that resonate with the findings presented in this study. For example, Wenner and O'Reilly Dennehy (1993) propose that being positively disposed towards television in general does not appear to decrease commercial avoidance activity.

***Hypothesis 4 – Planned versus Impulse Viewing as a Predictor of Observed PROPZAP***

Hypothesis 4 states that planned versus impulse viewing is a significant predictor of observed propensity to zap commercials. Impulse viewers have a higher propensity to zap commercials than planned viewers. This hypothesis is not supported in that planned versus impulse viewing is not significantly associated with observed PROPZAP.

Although planned viewers do spend more time off-channel during the ad breaks than impulse viewers, this difference is not significant. This result suggests that off-channel time during ad breaks is not related to programme loyalty. Planned viewers are as prone to being off-channel during the ad breaks as impulse viewers despite that they have made a conscious decision

to watch a particular programme. This result is consonant with Kaye (1994) who reports that there are no significant associations between planned viewing and channel switching activity.

By contrast, there are studies indicating that unplanned or impulse viewing (Heeter & Greenberg, 1985) and low programme guide use (Wenner & O'Reilly Dennehy, 1993) are more likely to result in commercial avoidance and reduced commercial recall (Galpin & Gullen, 2000).

***Hypothesis 5a – RCD Empowerment as a Predictor of Observed PROPZAP***

Hypothesis 5a states that RCD empowerment is a significant predictor of observed propensity to zap commercials. This hypothesis is supported in that there is a significant association between RCD empowerment and observed PROPZAP.

***Hypothesis 5b – RCD Empowerment as a Predictor of Reported PROPZAP***

Hypothesis 5b states that RCD empowerment is a significant predictor of reported propensity to zap commercials. This hypothesis is supported in that there is a significant association between RCD Empowerment and Reported PROPZAP.

RCD empowerment is the primary driver of both observed and reported PROPZAP and therefore represents the most important predictor of channel switching within the parameters of this study. It is notable that an extrinsic remote control device is a significant predictor of channel switching whereas an intrinsic cognitive driver such as the attitude towards television advertising is not. This supports the notion that channel switching is predominantly a behavioural or learned response to advertising in general rather than a cognitive response to each advertising message (Cronin, 1995; Danaher, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1997).

There are a number of studies that support these findings which emphasize the importance of the RCD on channel switching. Cronin (1995) suggests that 82% of zaps are non-discriminating, being broadly triggered by ad avoidance while Danaher (1995) notes that access to a VCR/remote control device is the most important predictor of household zapping behaviour. In effect, the remote control device empowers the viewer to avoid advertising messages on television (Walker et al., 1993c; Wenner & O'Reilly Dennehy, 1993).

***Hypothesis 6a – Advertising Triggers as a Predictor of Observed PROPZAP***

Hypothesis 6 states that advertising triggers are a significant predictor of observed propensity to zap commercials. This hypothesis is not supported in that advertising triggers are not significantly associated with observed PROPZAP.

***Hypothesis 6b – Advertising Triggers as a Predictor of Observed PROPZAP***

Hypothesis 6b states that advertising triggers are a significant predictor of reported propensity to zap commercials. This hypothesis is supported in that advertising triggers are significantly associated with observed PROPZAP.

The lack of significance in the observed channel switching environment may be due to the viewer not having access to the RCD to execute the zap, despite being exposed to stimuli that may otherwise have triggered a switch. However, the association with reported channel switching indicates that viewers do associate their switching behaviour with negative advertising triggers such as an irritating or an overly repeated ad. This suggests that that the zapping process is not entirely random as suggested by Danaher (1995). Moreover, the capability of a repeated, irritating, recent or disliked ad to trigger the switch is supported by Cronin's (1995) contention that at least a minor portion of zapping behaviour (18%) is discriminate.

***Hypothesis 7a – Viewer Age as an Influencer of Observed PROPZAP***

Hypothesis 7a states that younger viewers display significantly higher levels of observed propensity to zap commercials than older viewers. This hypothesis is supported in that there is evidence of a significant relationship between age and observed PROPZAP. Younger viewers do appear to spend more time off-channel than older viewers during television advertising breaks.

***Hypothesis 7b – Viewer Age as an Influencer of Reported PROPZAP***

*Hypothesis 7b states that younger viewers report significantly higher levels of propensity to zap commercials than older viewers. This hypothesis is not supported in that there is no evidence of a significant relationship between age and reported PROPZAP. However, younger viewers do appear to report spending more time off-channel than older viewers during television advertising breaks but this difference is not significant.*

***Hypothesis 7c – Viewer Gender as an Influencer of Observed PROPZAP***

Hypothesis 7c states that male viewers display significantly higher levels of observed propensity to zap commercials than female viewers. This hypothesis is not supported as there is no evidence of gender influencing observed channel-switching.

***Hypothesis 7d – Viewer Gender as an Influencer of Reported PROPZAP***

Hypothesis 7d states that male viewers report significantly higher levels of propensity to zap commercials than female viewers. This hypothesis is not supported as there is no evidence of gender influencing reported channel switching.

This outcome adds credibility to a growing number of studies in which no apparent effect of gender is evident in advertising avoidance (Speck & Elliott,

1997) or channel switching behaviour (Cronin, 1995; Danaher, 1995; Kitchen, 1986).

***Hypothesis 8 – Programme Genre***

Hypothesis 8 states that the observed propensity to zap commercials varies significantly among selected programme genres. This hypothesis is not supported as programme genre is not significantly associated with off-channel activity. Based on the four selected genres (movies, sitcoms, news and quiz shows), the news is associated with the least commercial zapping. Since the news is a highly rated programme, this does add some support to the contention that highly rated programmes enjoy better audience retention during commercial breaks (Danaher, 1995; Galpin & Gullen, 2000; Krugman et al., 1995; Poltrack, 1997). Whereas in the Danaher (1995) study, game/quiz shows enjoyed the lowest levels of off-channel viewing during commercial breaks, this is not reflected in the current study where off-channel activity for quiz shows is the highest of the four selected genres. However, the variation in the levels of off-channel time is not significant among the selected genres.

Moreover, viewers spent significantly more time off-channel for the selected genres (Movies, News, Sitcoms, Quiz Shows) than for programmes outside of these selections. No specific comment can be made of the significance of this finding since the 'other programmes' category contains a cross-section of many different genres.

Table 6.19 summarises the statements of hypothesis for this study in relation to the predictor variables and states the extent of support for each hypothesis.

**Table 6.19 Summary of Research Outcomes against Statements of Hypotheses for Predictor Variables**

| Hypothesis | Statement of hypothesis | Support |
|---|---|---|
| *Hypothesis 1a* | Perceived Clutter is a significant predictor of observed propensity to zap commercials across all genres. | Not Supported |
| *Hypothesis 1b* | Perceived Clutter is a significant predictor of reported propensity to zap commercials. | Supported |
| *Hypothesis 2a* | Channel proliferation is a significant predictor of observed propensity to zap commercials. | Not Supported |
| *Hypothesis 2b* | Channel proliferation is a significant predictor of reported propensity to zap commercials. | Not supported |
| *Hypothesis 3* | Attitudes towards TV advertising is a significant predictor of reported propensity to zap commercials. Viewers with negative attitudes towards television advertising have a higher reported propensity to zap commercials. | Not supported |
| *Hypothesis 4* | Planned or impulse viewing is a significant predictor of observed propensity to zap commercials. Impulse viewers have a higher propensity to zap commercials than planned viewers. | Not supported |
| *Hypothesis 5a* | RCD Empowerment is a significant predictor of observed propensity to zap commercials. | Supported |
| *Hypothesis 5b* | RCD Empowerment is a significant predictor of reported propensity to zap commercials. | Supported |
| *Hypothesis 6a* | Advertising Triggers are a significant predictor of observed propensity to zap commercials. | Not supported |
| *Hypothesis 6b* | Advertising Triggers are a significant predictor of reported propensity to zap commercials. | Supported |

Table 6.20 provides a summary of the statements of hypothesis for this study in relation to the background variables and states the extent of support for each hypothesis.

**Table 6.20 Summary of Research Outcomes against Statements of Hypotheses for Background Variables**

| Hypothesis | Statement of hypothesis | Support |
|---|---|---|
| *Hypothesis 7a* | Younger viewers display significantly higher levels of Observed propensity to zap commercials than older viewers. | Supported |
| *Hypothesis 7b* | Younger viewers report a significantly higher propensity to zap commercials than older viewers. | Not supported |
| *Hypothesis 7c* | Male viewers display significantly higher levels of Observed propensity to zap commercials than female viewers. | Not supported |
| *Hypothesis 7d* | Male viewers report a significantly higher propensity to zap commercials than female viewers. | Not supported |
| *Hypothesis 8* | The Observed propensity to zap commercials varies significantly among programme genres. | Not supported |

## Summary

This chapter presents the key findings associated with this study. Based on a multiple regression analysis, this research uncovers a number of predictors of both observed and reported channel switching behaviour. RCD empowerment and age are significantly associated with observed PROPZAP whereas RCD empowerment, advertising triggers and perceived clutter are associated with reported PROPZAP. The low levels of R-squared indicate that these predictors account for only a small amount of variation in observed PROPZAP ($r^2$ = 0.08) and reported PROPZAP ($r^2$ = 0.184) but this is consistent with similar studies. This adds credence to the notion that

commercial zapping is a behavioural response to commercials in general rather than the result of the cognitive evaluation of a specific television commercial. This notion is strengthened by the absence of influence of 'attitudes towards advertising' on either observed or reported PROPZAP.

# CHAPTER SEVEN: CONCLUSION

## Overview

In this chapter, key findings are revisited and conclusions are drawn from the study. Moreover, the importance of these findings are discussed in terms of their relevance for both academics and practitioners. Conceptual contributions of this study include the definition of PROPZAP and its further refinement into observed and reported PROPZAP. The development of the SITUZAP scale is acknowledged as a significant contribution to this area while the methodological approach employed has advanced the scope for the evaluation of potential new predictors of channel switching. The study offers a stable measure of the extent to which viewers are off-channel during commercial breaks and identifies those predictors that play a role in effecting channel-switching activity. The significance or non-significance of each proposed predictor of channel switching is discussed within the context of the literature in order to position its contribution to this body of knowledge. Limitations of the study include sample selection, restrictions on viewers not in control of the RCD to switch channels during ad breaks and reliance on the honesty of the observers. Finally, the scope for future research that stems from this study is addressed, encouraging researchers to advance the accumulation of knowledge into this important area.

## Zapping, Leaving the Room and Muting

Three outcome variables are associated with this study. Viewers' propensity to zap commercials (PROPZAP) were monitored during the observation exercise (observed PROPZAP) and were also estimated (reported PROPZAP) by respondents in the survey. Viewers' propensity to leave the room (PROPLEAVE) were also monitored during the observation (observed PROPLEAVE) as well as being estimated (reported PROPLEAVE) by respondents in the survey. Viewers' propensity to mute the television set during commercial breaks (PROPMUTE) were only monitored during the observation phase (observed PROPMUTE).

***Reported versus Observed Propensity to Zap Commercials***

One of the primary research objectives in this study is to determine what percentage of advertising time is missed as a result of channel switching activity. The portion of commercial time spent off-channel based on previous studies varies from as low as 3.4% (Siddarth & Chattopadhyay, 1998) to as high as 61% (Moriarty & Everett, 1994). This study indicates that the average time spent off-channel during advertising breaks lies approximately midway between these extremes. Based on the observed propensity to switch channels, this study indicates that 36.8% of the advertising break is spent off-channel.

Moreover, previous studies report a variety of statistics for reported (Greene, 1988; Heeter & Greenberg, 1985; Kitchen, 1986; Speck & Elliott, 1997; Tse & Lee, 2001; Yorke & Kitchen, 1985) and observed channel switching (Danaher, 1995; van Meurs, 1998; Zufryden et al., 1993). To date, only Kaye (1994) has investigated the difference between reported and observed channel switching within the same study. Kaye's study (1994) reports 'ten-fold' more observed zaps compared to reported zaps. However, in the current study (measuring off-channel time rather than the number of zaps), there is a notable consistency between the average observed off-channel time during ad breaks (36.8%) and average reported time spent off-channel (46.96%). Moreover, these measures are moderately correlated ($r = 0.28$) indicating that viewers do have a sense of the percentage time that they miss commercials on the programme channel.

Channel switching represents a weighty issue for advertisers (Cronin, 1995). On average, viewers are observed to be off-channel 36.8% of the time during advertising breaks as a result of channel switching. The remarkable consistency of results underlying this figure over four separate observation occasions supports its reliability as an indicator of channel switching activity. Moreover, the naturalistic basis for this enquiry as well as the extensiveness of the research both in terms of sample size and intensity suggests that this

result is a current best-estimate of the extent of channel switching within mature television markets.

### *Reported versus Observed Propensity to Leave the Room*

Although not a primary aim of this study, the proportion of the ad break missed as a result of leaving the room is measured. Although viewers report to be out of the room for 38.6% of the advertising break, observation suggests that they are out of room for only 14.3% of the time. There appears to be no previous studies to serve as a basis for direct comparison with these results. However, it is clear that reported PROPZAP (46.96%) is a reasonably accurate approximation of observed PROPZAP (36.8%) relative to reported PROPLEAVE (38.6%), which is a highly overstated estimate of observed PROPLEAVE (14.3%).

### *Observed Propensity to Mute the Television Set*

It was expected that this measure would be relatively insignificant and this proved correct in that, on average, the television set is muted for only 2.1% of the advertising break. This outcome is based only on the observation component. In the interests of parsimony, the survey excluded the reported ad break time that the TV set is muted. Therefore, it is not possible to derive an observed versus reported comparison for muting during the advertising breaks. Moreover, there appears to be no previous studies from which to draw comparison for PROPMUTE.

## Significant Predictors of Channel Switching (PROPZAP)

The primary objective of this study is to determine the extent to which identified independent variables predict both observed and reported channel switching activity. From the results of the study, it is clear that the predictor variables explain relatively low levels of variation in channel switching activity for both observed and reported channel switching. Only 8 percent of the observed propensity to switch channels and 18.4 percent of reported channel switching are explained by the predictor variables. These low levels of association between predictor variables and commercial zapping support the view that channel switching during the ad breaks is largely a random process, independent of underlying systematic drivers (Danaher, 1995).

### *RCD Empowerment*

Only one variable, RCD empowerment, is a significant predictor of both observed and reported channel switching. Notably, RCD empowerment is the most important predictor of channel switching in both observed and reported environments. This suggests that, for the relatively small portion of non-random variation in channel switching activity, 'we switch because we can'. Access to a remote control in mature markets is synonymous with television viewing given that almost all households are in possession of at least one RCD (Bellamy & Walker, 1996). In the current study, 99.6% of homes had access to between 1 and 4 remote control devices with an average of 1.22 RCDs per household.

The literature suggests that viewers' use of the RCD to switch channels is a search for alternatives (Bellamy & Walker, 1996; Benjamin, 1993, p.22), perhaps a reactance to restore an eliminated freedom. Sampling other channels to see what else is on is the primary motivator for channel switching while avoiding commercial is in the top five reasons for switching (Walker et al., 1993c; Wenner & O'Reilly Dennehy, 1993). Although this study does not attempt to identify the underlying motivation for using the remote control device, results do confirm the importance of the RCD in driving channel

switching. Notably this study confirms the findings of Danaher (1995) that the RCD is one of the most important factors influencing channel switching activity.

***Advertising Triggers***

The second most important predictor of reported channel switching is advertising triggers. Advertising triggers are those advertising stimuli that initiate the channel switch. The trigger may be a commercial that has been seen very recently, an irritating/disliked commercial or even a overexposed ad. The emergence of advertising triggers as a significant predictor of reported PROPZAP is noted. Viewers who report higher propensities to zap commercials are also predisposed to switch as a result of some negative stimulus perceived to associate with the ad.

However, the predictive influence of advertising triggers on reported channel switching does not flow through to the observed viewing environment. 'Advertising triggers' is not a significant predictor of the observed propensity to switch channels during ad breaks. It may be argued that this stems from group viewing environments in which those individuals not in possession of the remote control are unable to exercise their personal channel switching preferences. However, in single person viewing environments drawn from the study, there is still no evidence of a significant positive correlation between advertising triggers and the observed propensity to zap commercials ($r = 0.182$).

This result is consistent with van Meurs (1998) who states that the level of irritation experienced by the viewer does not appear to affect commercial zapping. Moreover, this outcome supports the contention that advertising avoidance (including channel switching) is a learned pattern of response to advertising in general rather than a response to specific commercials (Cronin, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1997).

***Perceived Clutter***

The final and least important significant predictor of reported PROPZAP is 'perceived clutter'. This construct is the product of the viewer's perceived levels of advertising excessiveness and irritation resulting from advertising exposure. The association between perceived clutter and reported channel switching indicates that viewers report to zap commercials when the advertising messages are perceived as both excessive and irritating. Although excessive advertising alone is not a significant predictor of reported channel switching ($p = .063$), it does become a significant predictor once it blends with perceived levels of advertising irritation to form the construct 'perceived clutter'.

The inclusion of perceived clutter as a predictor of channel switching is generally supported in the literature (Chang-Hoan & Hongsik, 2004; Danaher, 1995; McDonald, 1996; Speck & Elliott, 1998). However, it is noted that perceived clutter does not emerge as a significant predictor of observed channel switching activity. Again, it may be argued that this stems from group viewing environments in which those individuals not in possession of the remote control are unable to exercise their personal channel switching preferences. However, in single person viewing environments drawn from the study, there is still no evidence of a significant positive correlation between perceived clutter and observed PROPZAP ($r = -0.164$).

***Viewer Age***

Finally, the study identifies one of the background variables (age) as a significant influencer of observed channel switching. The evidence suggests that younger viewers switch channels more frequently during advertising breaks than older viewers. This result is consistent with a number of previous studies (Heeter & Greenberg, 1985; Jonas, 1996; McDonald, 1996; Speck & Elliott, 1997; Zufryden et al., 1993). Although this result adds some weight to the 'age debate' in channel switching studies, the limited influence of age on channel switching ($t = -2.7$) does not merit the creation of advertising

interventions to address zapping concerns among younger viewers. Notably, based on single person viewing environments, age remains a significant predictor of observed channel switching (t = -2.6). In this environment, age is again inversely correlated with channel switching (r = -0.348) and accounts for 12.1 percent of the variation in observed channel switching activity.

## Non-Significant Predictors of Channel Switching (PROPZAP)

A number of potential predictor variables fail to establish a significant association with channel switching. The methodological approach and weight of this study is sufficient to motivate that these variables are indeed not associated with channel switching activity. Further debate is encouraged and other factors may surface in the future. However, the drivers of channel switching activity are clearly not represented among the non-significant predictors discussed below.

### *Channel Proliferation*

Despite the weight of literature linking channel proliferation with channel switching (Abernethy, 1991; Heeter & Greenberg, 1985; Kaye, 1994; Zufryden et al., 1993), this study fails to support the contention that viewers with access to cable television spend (or report to spend) more time off-channel during commercial breaks compared to those without access to cable television. This finding does not refute the link between cable access and channel repertoire (Ferguson, 1992). However, it does indicate that viewers with access to more channel options do not necessarily exercise those options during commercial breaks.

### *Attitude Towards Television Advertising*

Attitudes towards television advertising emerges as a non-significant predictor of channel switching activity. This result is in contrast to studies that demonstrate a link between advertising avoidance and advertising attitudes (Lee & Lumpkin, 1992; Rojas-Mendez & Davies, 2005; Speck & Elliott, 1997). However, a link specific to advertising attitudes and observed channel switching activity has not previously been established in the literature. Moreover, the present study indicates that no significant association exists between these variables.

The literature points to an association between advertising attitudes and excessive advertising (Zhao, 1997), disruptive advertising (Alwitt & Prabhaker, 1992; Mord & Gilson, 1985; Webb & Ray, 1979) and overly repetitive advertising (Bauer & Greyser, 1968). Since these elements are embedded into Advertising Triggers and Peceived Clutter, one would expect that these variables are also non-significant predictors of *observed* channel switching activity – and this is indeed the case.

The disengagement between advertising attitudes and commercial zapping reinforces the notion that channel switching is a low-involvement activity, driven by expedience and reflex. There is no evidence of underlying cognition driving commercial zapping. This supports the notion that commercial zapping is a largely a learned pattern of response to advertising in general rather than a response to specific commercials (Cronin, 1995; Heeter & Greenberg, 1985; Speck & Elliott, 1997). This view is further supported by Cronin (1995) who reports that viewers only zap infrequently as a result of a conscious evaluation of each commercial.

***Planned versus Impulse Viewing***

Per the results of this study, planned versus impulse viewing is also a non-significant predictor of observed channel switching activity. Certain writers have suggested that impulse television viewing (Heeter & Greenberg, 1985) and low programme guide use (Wenner & O'Reilly Dennehy, 1993) are more likely to result in commercial avoidance. Moreover, Cronin (1995) reports a modest correlation ($r = 0.24$) between zapping and programme loyalty. Despite these examples of studies supporting the association between planned versus impulse viewing and channel switching, there are studies that support the contrary view. Kaye (1994) reports that viewers who often use programme guides make as many channel switches as those viewers who seldom make use of programme guides. This study supports the contention that planned and impulse viewers display equivalent levels of channel switching activity. This position is enhanced in that both the present study and Kaye's (1994) study make use of observation to monitor channel

switching. On the other hand, many studies that support the link between planned versus impulse viewer and commercial zapping are drawn from self-reports (Heeter & Greenberg, 1985; Wenner & O'Reilly Dennehy, 1993).

## Contribution of the Study

Four levels of contribution made by this study are discussed, being conceptual, scale development, methodological and managerial contributions.

### *Conceptual Contribution*

This study holds a number of conceptual implications for the body of literature in the area of advertising avoidance and channel switching. In terms of the theoretical foundations of this thesis, there does appear to be a measure of support for the contribution of reactance theory to this body of work (Brehm, 1966; Speck & Elliott, 1997; Wicklund, 1974). The association between perceived clutter and reported PROPZAP supports the notion of a viewer reacting to a lost freedom to access programme material in the face of increasing advertising clutter. Television consumers do appear to skip ads in order to re-establish their freedom (Edwards, Li, & Lee, 2002; Ha, 1996). Uses and gratifications theory (Joyce, 1967; Katz, 1959) underpins the association between the 'active viewer' and potential predictors, planned/impulse vieweing, RCD Empowerment and Advertising Triggers. The significance of RCD Empowerment as a predictor of Observed and Reported PROPZAP provides partial support for the notion of an active viewer shaping his or her media environment. On the other hand, social exchange theory (Chadwick-Jones, 1976) failed to forge an underlying conceptual link within this study, evidenced by the lack of significance between television advertising attitudes and channel switching.

Moreover, this study operationalises a definition of channel switching (PROPZAP) in terms of its impact on viewer exposure to television advertising. Observed PROPZAP is derived as the percentage of the commercial break for which the viewer or viewer group is off-channel.

Reported PROPZAP is the reported percentage of time that viewers spend off-channel during commercial breaks. The study also defines and employs two other measures of advertising avoidance. These are the percentage of commercial time for which the viewer leaves the viewing room (PROPLEAVE) and the percentage of commercial time for which the television set is muted (PROPMUTE).

Since there is no established standard across constructs employed in past studies, it is intended that the conceptual definitions presented in this study will be applied to future studies. This will ensure that the measurement tools used in channel switching and television advertising avoidance studies are standardized across future research efforts.

This study generates a conceptual model for testing the potential predictors of channel switching behaviour on both observed and reported channel switching. This offers insight into the predictors of both viewers' reported commercial zapping rates as well as their observed commercial zapping activity. Moreover, self-reported and observed rates of channel switching can be compared. Significant predictors can also be identified and compared between reported and observed channel switching activity.

***Scale Development Contribution***

A major contribution arising from this study is the development of a scale to measure those situational factors that influence channel switching (SITUZAP). Speck and Elliot (1997) make mention of the need to evolve our understanding of 'situational factors' in relation to advertising avoidance. The SITUZAP scale is an 11-item scale converging into two primary factors that underpin situational channel switching, namely RCD empowerment and advertising triggers. The scale is shown to be both a valid and reliable measure of situational channel switching behaviour during live television viewing. This initiative addresses an obvious gap in the literature in which only a single study (Siddarth & Chattopadhyay, 1998) alludes to unseen commercials not being zapped as often as previously exposed commercials.

Clearly a valid and reliable scale has the potential to represent and measure the variety of ways in which situational factors manifest in the context of channel switching. There is scope for verification and further refinement of the SITUZAP scale in future studies.

***Methodological Contribution***

The advancement of future research into the area of channel switching and television advertising avoidance depends upon a universal definition of core constructs as well as a common method of data collection. Inconsistencies in terminology and approach present as gaps in the literature that this study seeks to address. Key definitions presented in this study such as PROPZAP, PROPLEAVE, PROPMUTE and SITUZAP provide the basis for a shared language to drive future studies. If adopted by future researchers, these constructs will provide a platform to direct and standardize the collection of new data.

The diversity of research methodologies employed to date in the area of channel switching and ad avoidance hamper the potential for comparisons across studies. Moreover, limitations associated with self reports, (Cornwell et al., 1993; van Meurs, 1998; Walker & Bellamy, 1993b) stand in the way of progressing our research efforts. Despite the obvious weaknesses inherent in self-reports, this form of data collection continues even among more recent studies (Rojas-Mendez & Davies, 2005). Clearly, this area of research will only advance under a common methodology.

A multi-method approach delivers a superior understanding of zapping behaviour compared to survey research alone (Cronin, 1995). It is proposed that the observation/survey approach motivated and applied in this study becomes the standard for future research into the area of channel switching and television advertising avoidance. This approach is evolved in the present study following the outcome from two pilot phases. The observation/survey approach is a highly accessible, affordable and effective means of collecting a rich variety of relevant data in a complex research environment. This study

demonstrates that it is feasible to collect household viewing data in a naturalistic environment via the hidden observation approach. The survey phase following the observation component is also highly effective in gathering a plethora of viewer data. The success of the research depends on it being driven via the university system with Marketing Research students being trained into the observer role. However, since the university the primary mechanism through which this area of research is likely to be advanced, an alluring synergy flows from adopting the observation/survey approach as the universal methodology in channel switching and ad avoidance studies.

***Managerial Contribution***

This study offers a plethora of insights for practitioners. Firstly, the study suggests that as a result of mechanical (PROPZAP) and physical avoidance (PROPLEAVE) combined, around 50% of the available advertising time is missed by the programme audience. This represents significant erosion of the time that advertisers are paying for (Cronin, 1995). Once again, these results add weight to the call for television audience measurement systems to report on advertising audiences as well as programme audiences (Ephron & Gray, 2001).

One third of television viewers (36%) are likely to migrate to other channels during the advertising break via channel switching. When commercial breaks are 'roadblocked' across competing channels, it may be argued that grazers are likely to compensate for the loss of audience on any one channel. However, the act of channel switching is almost certain to disrupt the demographic composition of the commercial audience as well as the flow of the commercial messages themselves. It is the demographic make-up of the programme audience that attracts the advertiser in the first instance. Yet it is likely that the demographic profile of the audience actually receiving the advertiser's message is substantially different from that for whom the commercial message was intended and paid for. Arguably, this dilutes the best efforts of media planners to direct their clients' advertising towards relevant audiences.

In effect, television ratings, which are derived from programme audience measurement, are an inaccurate indicator of commercial audiences. Media planners should reconstruct their view of television from a 'medium that targets identifiable demographic audiences' to a medium that 'reaches aggregate television audiences with a demographic bent'. This implies that media planners must select spots across a variety of television stations in order to hedge their bets regarding where their 'channel surfing' target audience may be located during advertising breaks. This situation will continue until ratings data are adjusted to provide commercial audience profiles rather than programme audience profiles.

In terms of the predictors of channel switching behaviour, there are implications for both advertisers and television stations. Per Table 7.1 the predictor and background variables are differentiated based on whether they can or cannot be controlled by the advertiser or the television supplier.

**Table 7.1 Stakeholder Control over Predictor Variables in the Study**

| Predictor (and background) variables | Within the advertiser's control | Within the TV station's control |
|---|---|---|
| Perceived Clutter | No | Yes |
| Channel Proliferation | No | No |
| Attitude to TV Advertising | No | No |
| Planned versus Impulse Viewing | No | No |
| Advertising Triggers | Yes | No |
| RCD Empowerment | No | No |
| Age and Gender | No | No |
| Genre | No | Yes |

Advertisers can exercise at least partial control over advertising triggers by limiting levels of irritation, repetition and overexposure inherent in their advertising creative and scheduling. As advertising triggers play out as a significant predictor in this study, planners, agencies and other stakeholders should strive to minimize the triggers that are likely to lead to a switch (recently seen, disliked, irritating, too repetitive). Television advertising stakeholders should always be mindful of the role that an individual ad can

play in effecting a channel switch. A zapped commercial eliminates viewers' opportunity to see the follow-on ads in the commercial pod.

Perceived clutter is a significant predictor of reported channel switching. Television stations have the power to monitor and influence the extent of perceived clutter. Although reduced clutter equates to lower profit, the high rate of channel switching activity is a reminder that viewers hold the balance of power to elect to watch or not watch television commercials. Clearly, the extent of perceived clutter is an influencer with the potential to advance channel switching activity beyond what advertisers are prepared to bear. Moreover, increasing cable subscription suggests that the switchers will always find a programme to watch during the advertising breaks (Kaplan, 1985). Therefore, it would pay the television stations to monitor and address any rise in the levels of perceived clutter among television audiences.

Although genre is also under the control of television station management, this study indicates that there is no significant difference in how viewers switch channels during different programme environments. More research into this area in future may be necessary.

**Limitations of the Study**

There are a number of limitations that may hamper this study. Firstly, there is the limitation imposed by the sample selection. Since the observers were selected from university students, the majority of viewers observed were either siblings/peers between 15 and 29 years of age or parents between 40 and 59 years of age. Few of the viewers included in this study were in their thirties or were over 60 years of age.

A second limitation of this study is inherent in the process of switching channels. With multiple viewers watching a single television set, the channel switching patterns of the person with the remote control device are inherited by fellow viewers who do not have control of the remote. Although this is a practicality of television viewing, it does mean that an individual viewer's

switching preferences are not enacted unless he or she is in control of the RCD. For this reason, observed PROPZAP levels are imposed on all viewers in the same viewing environment regardless of whether an individual activated the RCD or not. This has the potential to distort the association between potential predictor variables and observed PROPZAP (the viewer's observed propensity to zap commercials). However, single viewer environments did not elicit vastly different results compared to the entire viewer group. Further research may be required to resolve this issue.

A third potential limitation of this study pertains to the methodological approach used. Despite every effort to induct and train the student observers, there is no way of ensuring that observers have acted in good faith throughout the process. Observers who were so inclined may have fabricated a set of circumstances and presented these for inclusion into the data set. In order to address this potential limitation, suspicious observation results were rejected from the data set. All relevant programmes were tape-recorded over the duration of the observation process. This offered validation for the observation data. Moreover, in an anonymous self-completion survey at the end of the process, observers were asked the extent to which they were honest during the observation. Eighty six percent of these reported that their results were completely accurate to the best of their ability while fourteen percent stated that there was a moderate extent of dishonesty inherent in their data.

Finally, it should be noted that this study is based on a generalized linear economic relationship between audience size and advertising rates which assumes that larger audiences equate to higher advertising rates. However, it is acknowledged that advertisers may pay disproportionately higher rates to reach specific segments, mainly light viewers, who join the audience later in the evening.

## Scope for Future Research

There is significant potential for further research based on this study. As mentioned in the contributions made by this study, the methodology employed can be implemented at any university that offers a unit in Marketing Research. Not only does it provide students with a practical learning application but it also standardizes the research approach used in this area of research.

Therefore, there is an obvious opportunity to replicate this study in other television markets in order to generate an extensive data set using the observer/survey approach. Not only does this provide a comparable set of channel switching data across different markets, but it also serves to track the dynamics underlying viewers' advertising avoidance behaviour. It may be interesting to apply this study to undeveloped and developing markets subject to different level of perceived advertising intrusiveness.

Ideally, a study of this type sets the scene for advancing the methodology to include in other types of advertising avoidance behaviour such as cognitive television advertising avoidance or to further explore behavioural avoidance. There is also opportunity to extend the study to observe the viewing of pre-recorded advertising material or to monitor live viewing outside of prime-time.

A surprising outcome of this study is that viewers who hold negative attitudes towards advertising do not display significantly greater propensity to change channels during ad breaks. Further studies may be conducted to determine whether viewers who hold negative attitudes towards television advertising are more inclined to adopt other forms of advertising avoidance such as leaving the room or cognitive avoidance of commercials.

## Summary

This chapter presents an overview of the results and draws conclusions from the study. Key findings are presented and interpreted to synthesize the key contributions made by this study. The major contributions from the study include conceptual, scale development, methodological and managerial contributions. Moreover, the implications of the study for both academics and practitioners are presented, highlighting the value of the study for both groups of stakeholders. Finally, future research is proposed in terms of both the replication and extension of this study to further enhance the accumulation of knowledge into this important area of research.

# Appendices

**Appendix 1**

**Transcript of focus group**

*Participants:*
Male 16 years (M16)
Female 19 years (F19)
Male 20 years (M20)
Male 23 years (M23)
Female 45 years (F45)

Moderator: Thanks for being here. The purpose of this discussion group is to explore your channel switching behaviour. You have been asked to participate in this discussion because you all watch at least one hour of television per day on average and you all have access to a remote control device. What I'd like you to think about is your use of the remote control, particularly during advertising breaks while you are watching television in the evenings. Now, you may be watching television alone or in a group. What I'd like you to write down any reason that you can think of might trigger you to make a channel switch during the advertising break. I am particularly interested in anything to do with the situation itself – perhaps something about your mood, the commercial itself, the number of viewers, where the remote is or what you have been watching. These are just some ideas. However, anything about your surroundings or your frame of mind that you feel may influence you to switch channels during an ad break is important, even if it seems trivial or silly. Please write down as many factors as you can think of on the paper provided.

(Provide 7 minutes for participants to complete the exercise)

Moderator: Ok let's start here. What triggers you to switch channels during advertising breaks while watching television in the evenings?

F45: Well, I always do it . I try to watch **more than one programme at once**. I am always looking to see what else is on and then I get very annoyed if there are ads on the other channels.

Moderator: Can the rest of you relate to that?

M23: Yes, it depends on what I am watching. If it's a something like the **Simpsons**, then I do switch channels to see what else is on. But if I am watching a **movie**, I am more likely to get a cup of coffee during the ad breaks.

Moderator: Why is that?

M23: I just want to sit down and watch a movie for two hours and don't want to be distracted but when the ad breaks come on, instead of channel hopping, I use that time to do something else, most likely to get something to eat or drink.

Moderator: Ok, are there any situational factors that you wrote down?

M20: Well I said also it depends on your mood. Sometimes you're watching TV just for entertainment, you're not watching a specific thing. So when adverts come on, there's a constant need to be entertained – so I switch the channel.

Moderator: So, if you plan to watch a particular programme, does that influence your switching behaviour versus if you're just watching to see what's on?

M20: Yes, it does. If you're watching something that you **really want to watch** and it's very interesting and you don't want to miss any section of it, then I **won't change channels** during the ad break.

Moderator: What point have you made?

M16: Some ads are quite annoying and **have nothing to do with me** – that's when I change channels.

Moderator: When you make a channel switch, are there any triggers that you have written down?

F19: Ads that people sing in – you know that ad about the Sultana Bran, you know when they sing, they sing about the cereal and that annoys me. I have to switch. When there are people dancing in the road in fifties outfits about cereal, I switch.

So, in one word, what is it about that advert that makes you switch.

F19: It's like Bradie bunchish, it's **irritating**.
Moderator: Irritation, does anyone else share that view?

M23: Oh yeah, there'd be a couple of ads that make me switch. Rick Hart or Retrovision. The adverts where people are too stingy to get real actors in.

Moderator: So, will you always switch during those ads?

M23: Well, I won't necessarily switch but I just can't watch them. So, I may **leave the room** and do something else.

Moderator: Anything else about the ads?

F45: Yes, I hate any adverts that has something horrible – like the one where the tongue comes out of the mouth.

Moderator: Does it irritate you?

F45: No, its repulsive. The other thing that I don't like is ads that put the church in a bad light. Like that one that 's on at the moment about the priest stealing that snack from somebody. I think that's wrong.

Moderator: Do you switch channels then?

F45: yes, I won't watch that ad.

Moderator: Anything else about the ads?

F19: Yeah, like the one's where they try to make the ads into a movie, like that 'it's a drama', RAC. It is **overplayed and irritating**.

Moderator: Is there a difference between an ad that is irritating and an ad that is disliked?

M23: Yes, sometimes an ad might catch your attention first time but for some reason they may overplay it. Even I liked it first time but it becomes irritating and then you start to **dislike** it.

Moderator: Does anybody have that point that if the ad is overplayed, you may switch?

M20: One thing with the AFL games, every time they score a goal, it's always an ad break regardless if they scored one just a minute ago. So, it just detracts from the game – the whole atmosphere.

Moderator: And in a word, how would you describe that situation?

M20: It's just **annoying**.

Moderator: Annoying, by virtue of being too what?

M20: Too constant, too **repetitive**.

F19: Sometimes they start with the ad and then before they come back, they play a shorter version. They start with the shorter version and then just before your programme comes on you have to sit through a long version. And you've just watched that ad. That's annoying.

M23: I find that with sports matches like soccer or cricket matches. You know how they have an ad break after every over – regardless. You might even see **the same ad in one ad break**.

Moderator: So, you've seen the ad now and you know that you have seen the same ad during the same or the previous ad break. Does that worry you that you have seen it so recently? Does that trigger you to change channel.

M16: Yes, especially if its one of those ads where they are yelling at you, especially the carpet ones, they had this Indiana Jones carpet one…

Moderator: Do you recall switching channel as a result of watching that overplayed ad. Or do you just watch it and think that it's annoying?

M16: I switch channels normally.

M23: Living in a house with different people, there is **peer pressure to switch** and since there are seven of us, the television is switched a lot during the ads.

Moderator: So, how does that someone who makes the choice – how do they get the right to switch the channel?

M23: Whoever shouts loudest, **whoever has got the remote**.

Moderator: How many remotes have you got?

M23: Just one. We used to have an old telly where we diddn't have a remote control. During the adverts no one would bother to get up to switch the channel – too lazy. Now, we've got the remote, Charlie, he flips all the time.

Moderator: Does Charlie dominate the remote?

M23: If someone's in there first and they are watching a particular programme, then they get to use the remote. It's just that Charlie is always in the TV room.

Moderator: How do the rest of you feel about the access to the remote control?

F45: My husband likes to take the control.

F19: My mom does, she switches all the time and it annoys me cause she is always switching and its like, you're not ready for it – you don't know when she's going to switch, it's like painful to watch. You're just getting into the ad or whatevers on that she's just switched to – she switches again and you think should I bother looking at the TV now?

F45: You see its all **those programmes that I am watching at once**….

F19: Eventually you want to scream…

F45: Sorry, was I upsetting you, I never even noticed.

Moderator: What about your household? How does it work with the remote?

M20: **It also just becomes habit**, for no reason, it just becomes a natural habit that you will change during the ad breaks. Like you're in that mind set that there must be something better on than watching adverts.

Moderator: Disregarding what ad is on, you will switch when the ad break comes on?

M23: For me that came about with cable television. You'll always find something on cable – 24 seven news or sport. So rather than watching an ad, I'll personally go to the news headlines or sport.

F19: I wrote down that I **change to music max cause there is always something on that you know is going to be music rather than watching an ad**.

Moderator: How consistently do you do that?

F19: Most ad breaks. I set Foxtel to music max channel and you always have to wait for one song, maybe two and then change back.

Moderator: Can you relate to that?

M16: I don't always change channels during the ad breaks but I don't pay attention to the ads.

Moderator: Would you say that you have a good grasp of the ads on at the moment?

M16: Some of them, I like the beer ads because they are quite funny.

F45: Yes, I was going to say that humour is important. If an ad is funny, I would probably watch it.

M23: Some people may find the tongue ad to be funny.

F45: Oh no, that can't be.

F19: There's a lot of ad that just…. You know when you get a swimmer for Toby's that kind of ad….it's just endorsing the product. They don't really like it.

F45: Yes, and those make up ads, like Mabeline..

Moderator: Do you switch during those ads?

F19: Those are not actually as annoying. Not like the sing song ads ……

M23: I would normally change channels when I am **watching a repeat** of the Simpsons, for example.

Moderator: Any other points that you have noted.

F19: If you are really comfortable and you **left the remote on top of the television, you're not going to get up and get it**. You might have got into

that really comfortable position – you can just relax or you can mute it. I mute it a lot – I mute the ads if I don't like them instead of changing channels and I read while the ads are on.

Moderator: Can anyone else relate to muting the ads during the break?

F45: I must say they are too loud in the ads. Much louder than the programmes.

Moderator: Can you relate to there being more ads than there used to be in the past years?

M20: Yes, there are **lots of ads on Australian television** compared to other countries that I have lived in.

M16: Sometimes on channel 10 they advertise that it is only a short ad break. But most other ad breaks are too long.

M23: **Watching a movie is a bit of a chore**. You have to give yourself three hours to watch a two hour movie.

F19: A lot of people tape them and then fast forward past the ads.

F45: That's the beauty of it. It gives you the **opportunity to watch another show at the same time**.

M23: Sometimes when they have a movie on TV, I rather get the DVD from the video store rather than watch it on live television. You'd rather pay money….

Moderator: Contrast that to watching something on Foxtel where you can't stop start as you want. Are there any negatives watching it on Foxtel?

M20: I think **ad breaks …well there's too many of them**. So if they do have less breaks that will be good.

Moderator: Are there any other points that we haven't covered?

M23: Time of day is important. If the news is on or it's **around my dinner-time, that would affect how often I switch channels**. Or if it's very late at night, I may not switch as much.

Moderator: Anything else?

F45: I may **switch to get a cricket score** or a footy score or something. Or to get the news headlines on Foxtel.

Moderator: Any other thoughts. No? Well, thanks for attending this discussion group. Your input is appreciated.

## Appendix 2

## Pilot 2 – Factor Analysis of channel switching triggers

**Communalities**

| | Initial | Extraction |
|---|---|---|
| Switch when irritating ad comes on | 1.000 | .519 |
| Switch if ad repeated often | 1.000 | .704 |
| Switch if ad seen recently | 1.000 | .639 |
| Switch - dislike ad | 1.000 | .604 |
| Switch - too many ads | 1.000 | .455 |
| Switch - to see what else is on | 1.000 | .534 |
| Switch out of habit | 1.000 | .530 |
| Switch - ads disrupt programme | 1.000 | .515 |
| Switch - watch 2 programmes | 1.000 | .428 |
| Switch - asked by others | 1.000 | .725 |
| Switch - boredom | 1.000 | .680 |
| Switch - remote within reach | 1.000 | .552 |
| Switch - irrelevant product | 1.000 | .497 |
| Switch - sports score | 1.000 | .273 |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.079 | 36.277 | 36.277 | 5.079 | 36.277 | 36.277 | 3.291 | 23.510 | 23.510 |
| 2 | 1.496 | 10.684 | 46.961 | 1.496 | 10.684 | 46.961 | 3.142 | 22.444 | 45.953 |
| 3 | 1.081 | 7.721 | 54.683 | 1.081 | 7.721 | 54.683 | 1.222 | 8.729 | 54.683 |
| 4 | .973 | 6.951 | 61.634 | | | | | | |
| 5 | .863 | 6.167 | 67.801 | | | | | | |
| 6 | .826 | 5.898 | 73.699 | | | | | | |
| 7 | .680 | 4.856 | 78.555 | | | | | | |
| 8 | .594 | 4.242 | 82.797 | | | | | | |
| 9 | .513 | 3.665 | 86.462 | | | | | | |
| 10 | .483 | 3.447 | 89.909 | | | | | | |
| 11 | .430 | 3.075 | 92.984 | | | | | | |
| 12 | .369 | 2.637 | 95.620 | | | | | | |
| 13 | .329 | 2.350 | 97.970 | | | | | | |
| 14 | .284 | 2.030 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

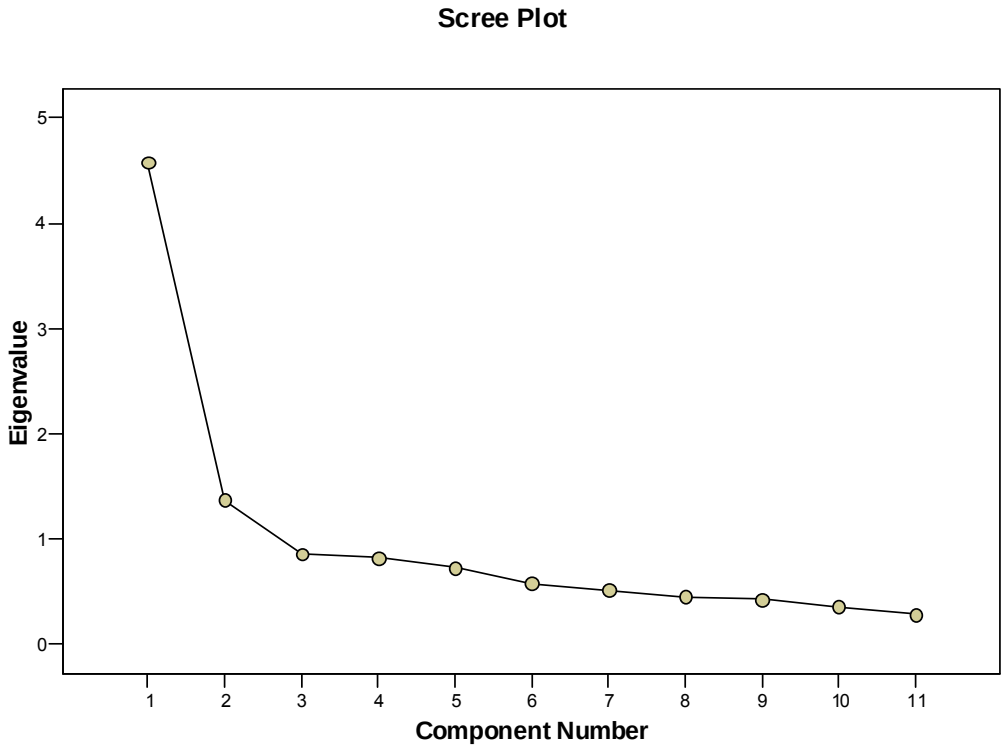
**Rotated Component Matrix(a)**

| | Component | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Switch - remote within reach | .677 | | |
| Switch - to see what else is on | .677 | | |
| Switch out of habit | .676 | | |
| Switch - ads disrupt programme | .676 | | |
| Switch - watch 2 programmes | .636 | | |
| Switch - boredom | .561 | .311 | .518 |
| Switch - too many ads | .559 | .371 | |
| Switch - sports score | .431 | | |
| Switch if ad repeated often | | .814 | |
| Switch if ad seen recently | | .753 | |
| Switch - dislike ad | | .749 | |
| Switch when irritating ad comes on | | .686 | |
| Switch - irrelevant product | | .639 | |
| Switch - asked by others | | | .845 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 5 iterations.

## Appendix 3

## Factor Analysis – Pilot 2
## Second phase




**Communalities**

| | Initial | Extraction |
|---|---|---|
| Switch when irritating ad comes on | 1.000 | .473 |
| Switch if ad repeated often | 1.000 | .716 |
| Switch if ad seen recently | 1.000 | .635 |
| Switch - dislike ad | 1.000 | .616 |
| Switch - too many ads | 1.000 | .449 |
| Switch - to see what else is on | 1.000 | .524 |
| Switch out of habit | 1.000 | .542 |
| Switch - ads disrupt programme | 1.000 | .533 |
| Switch - watch 2 programmes | 1.000 | .429 |
| Switch - remote within reach | 1.000 | .558 |
| Switch - irrelevant product | 1.000 | .479 |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4.581 | 41.646 | 41.646 | 4.581 | 41.646 | 41.646 | 2.981 | 27.100 | 27.100 |
| 2 | 1.373 | 12.484 | 54.130 | 1.373 | 12.484 | 54.130 | 2.973 | 27.029 | 54.130 |
| 3 | .862 | 7.835 | 61.965 | | | | | | |
| 4 | .825 | 7.501 | 69.466 | | | | | | |
| 5 | .729 | 6.630 | 76.096 | | | | | | |
| 6 | .581 | 5.278 | 81.374 | | | | | | |
| 7 | .517 | 4.702 | 86.075 | | | | | | |
| 8 | .457 | 4.155 | 90.230 | | | | | | |
| 9 | .429 | 3.898 | 94.129 | | | | | | |
| 10 | .358 | 3.258 | 97.387 | | | | | | |
| 11 | .287 | 2.613 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

**Rotated Component Matrix(a)**

| | Component | |
|---|---|---|
| | 1 | 2 |
| Switch if ad repeated often | .820 | |
| Switch - dislike ad | .758 | |
| Switch if ad seen recently | .745 | |
| Switch when irritating ad comes on | .684 | |
| Switch - irrelevant product | .629 | |
| Switch - remote within reach | | .725 |
| Switch - ads disrupt programme | | .695 |
| Switch out of habit | | .690 |
| Switch - to see what else is on | | .686 |
| Switch - watch 2 programmes | | .654 |
| Switch - too many ads | .335 | .580 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 3 iterations.

## Appendix 4

## Scale Reliability – Pilot Study

### Factor 1

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .816 | 5 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Switch when irritating ad comes on | 17.34 | 28.690 | .487 | .815 |
| Switch if ad repeated often | 17.39 | 25.344 | .715 | .746 |
| Switch if ad seen recently | 18.36 | 26.442 | .661 | .764 |
| Switch - dislike ad | 17.15 | 26.348 | .631 | .772 |
| Switch - irrelevant product | 18.59 | 28.397 | .543 | .798 |

### Factor 2

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .793 | 6 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Switch - too many ads | 21.07 | 36.490 | .519 | .768 |
| Switch - to see what else is on | 20.05 | 37.777 | .595 | .751 |
| Switch out of habit | 21.56 | 36.423 | .574 | .754 |
| Switch - ads disrupt programme | 21.64 | 36.704 | .583 | .752 |
| Switch - watch 2 programmes | 21.74 | 38.577 | .441 | .786 |
| Switch - remote within reach | 21.07 | 37.556 | .574 | .755 |

## Appendix 5

## Reliability Co-efficient – Reasons for Channel Switching

## Factor 1

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .883 | 5 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Irritating | 18.73 | 30.615 | .753 | .850 |
| Repeated | 19.00 | 30.059 | .801 | .839 |
| Seen recently | 19.73 | 32.330 | .705 | .862 |
| Dislike | 18.85 | 30.412 | .744 | .853 |
| Too many ads | 19.41 | 33.547 | .599 | .885 |

## Factor 2

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .808 | 6 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| See what else on | 19.80 | 40.656 | .541 | .784 |
| Habit | 21.40 | 36.332 | .646 | .759 |
| Disrupt | 21.28 | 37.745 | .558 | .779 |
| Two programmes | 21.44 | 38.277 | .492 | .795 |
| Remote within reach | 20.88 | 36.671 | .625 | .764 |
| Product nothing to do with me | 21.42 | 37.536 | .549 | .782 |

## Appendix 6

## Test-Retest Correlations between scale items

| | | FirstTest | SecondTest |
|---|---|---|---|
| FirstTest | Pearson Correlation | 1 | .662(**) |
| | Sig. (2-tailed) | | .000 |
| | N | 220 | 220 |
| SecondTest | Pearson Correlation | .662(**) | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 220 | 220 |

** Correlation is significant at the 0.01 level (2-tailed).

**Appendix 7**

**Observation Exercise Pilot 1**
**Phase 1 - Observation**

Over a period of 30 minutes, you are required to observe the behaviour of one or more of your household members (10 years or older) watching television. Your observation is to start at either 6pm, 6.30pm, 7pm, 7.30pm, or 8pm. Time your start to coincide with a 30 minute programme so that the people being observed are likely to have time to complete a survey immediately afterwards.

It is important that the person(s) being observed do not know that they are being watched since this tends to make them self-conscious and may detract from the results. If necessary, your excuse for writing down information is that you have a university assignment and you are preparing the outline before you start. Sit away from the person(s) that you are observing so that they cannot see what you are writing.

You will need to use a stopwatch or a wristwatch that measures seconds since the observation requires that you accurately note how long the television is tuned to each channel. Also be aware of the channel logos which indicate what channel the viewers have skipped to.

Time at the start of your observation: _____

Room in which observation is to take place _____

Number of functional TV remote control devices in the room? _____

Do you have cable television (Foxtel)? _____

Number of television sets in the household _____

Number of people permanently living in the household _____

If one, two or three people (other than yourself) over ten years of age are watching television, you should observe all these viewers. If there are more than three viewers, select only three from the group. List the age, gender, highest education and whether they are household members or guests:

| **People in the room over 10 years of age** | **Age** | **Gender [M or F]** | **Highest level of education** | **Member of household or guest** |
|---|---|---|---|---|
| Person A | | | | |
| Person B | | | | |
| Person C | | | | |

Complete as many of these segments as is necessary to record the full 30 minutes of television viewing:

| Viewing Segment | Which channel | For how long | Person selecting channel | What is person A doing? | What is person B doing? | What is person C doing? | Summary of channel switching behaviour during Ad breaks only |
|---|---|---|---|---|---|---|---|
| **Programme Segment 1** | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| **Ad Break 1** | | | | | | | How many full ads were screened before the first zap? _____<br><br>How many full ads were screened on the programme channel? _____<br><br>How many full ads were screened on any channel? _____ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| **Programme Segment 2** | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Viewing Segment | Which channel | For how long | Person selecting channel | What is person A doing? | What is person B doing? | What is person C doing? | Summary of channel switching behaviour during Ad breaks only |
|---|---|---|---|---|---|---|---|
| **Ad break 2** | | | | | | | How many full ads were screened before the first zap? _____<br><br>How many full ads were screened on the programme channel? _____<br><br>How many full ads were screened on any channel? _____ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| **Programme Segment 3** | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| **Ad break 3** | | | | | | | How many full ads were screened before the first zap? _____<br><br>How many full ads were screened on the programme channel? _____<br><br>How many full ads were screened on any channel? _____ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

**Appendix 8**

**Survey – Pilot Study 1**

At this time you can acknowledge that you have been observing their viewing behaviour and you may provide an explanation as follows:

“The university assignment that I am required to do was to observe household members watching television. I have been noting what programmes you have been watching and have kept track of your channel changes. This is an anonymous survey and therefore your names are not shown anywhere. The survey will take no longer than fifteen minutes to complete”.

*(Hand out the self completion questionnaire below to those who were in the room for at least fifteen minutes of the viewing period that you have monitored)*

## Television Survey – Pilot 1

Thanks for your time in completing this survey! The aim of this survey is to get your feedback on what you were watching during the past 30 minutes and to find out how you feel about television. There are no right or wrong answers – only what you remember or your opinions are important.

List all channels that the television was tuned to over the past 30 minutes

_____

Which best describes your viewing during the past 30 minutes? *(Please tick all appropriate boxes)*

ڤ I was watching a particular programme
ڤ I watch this programme as often as I can
ڤ I was looking to see if there was anything on that I wanted to watch
ڤ I wanted to watch something and was browsing to see what was on
ڤ I had been watching previously and stayed to see what else was on
ڤ I had nothing better to do and so ended up watching TV

Did you plan to watch the programme that you have viewed during the past 30 minutes?

ڤ Yes
ڤ No

Would you have preferred to watch another programme during the past 30 minutes?

ڤ Yes
ڤ No

What was the most important reason(s) for watching the programme on the selected channel? *(Tick all appropriate options)*

ڤ Entertainment
ڤ Information
ڤ Boredom
ڤ Habit
ڤ Interest
ڤ Other (please state) _____

Estimate how many of the 30 minutes were spent on channels other than the one you were mostly watching:

_____

Did you personally use the remote control to make any channel changes during the 30 minute period?

ڤ Yes
ڤ No

What are the main reason(s) why you switch channels when watching television?

_____

_____

_____

_____

_____

_____

Estimate how many minutes you think that each ad break lasts

_____

How many ad breaks do you think there are every half hour?

_____

On average, how many ads do you think that there are in each ad break?

_____

Rate each of the following in terms of how often they apply to your decision to switch or not to switch channels. There are no right or wrong answers. Only your personal opinions matter. Please note your answer by circling **one** number on each line.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I switch whenever an advertising break comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch only if an irritating ad comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that has been repeated too often | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that I have seen very recently | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I do not switch if I like the commercial | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because there are too many ads on television these days | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch to see what else is on other channels | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch out of habit | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because the ads disrupt the programme that I am watching | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch so that I can watch two programmes at the same time | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |

Tick the box alongside those activities that you **often** do during the television advertising breaks:

- ☐ Leave the room
- ☐ Change the channel to see what else is on
- ☐ Change the channel to avoid the commercials
- ☐ Change channels to watch another programme at the same time
- ☐ Change the channel to annoy others in the room
- ☐ Talk to others in the room
- ☐ Turn down the sound on the television
- ☐ Mute the sound on the television
- ☐ Read something
- ☐ Use a computer
- ☐ Doze off
- ☐ Other (please state) _____

Given below are some statements about advertising. There are no right or wrong answers. Only your personal opinions matter. Please note your answer by circling **one** number on each line.

| | |
|---|---|
| I like most television advertising | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I don't believe the claims that are made on television ads | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I find most advertising to be annoying | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| Advertising keeps me informed about what to buy | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that advertising is a waste of my time | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| In my opinion, advertising leads to wasteful buying | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that there is far too much advertising on television these days | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is too repetitive | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| Advertising makes it difficult for me to locate programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that advertising interferes with programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| In my opinion, advertising interrupts the programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| Rate your overall liking or disliking of television advertising | Very disliked 1 2 3 4 5 6 7 Very liked |
| If you could buy a device that automatically cuts out television advertising, would you consider buying it? | No way 1 2 3 4 5 6 7 Definitely |
| How much would you be prepared to pay for such a device? | $ _____ |

During the 30 minutes viewing period, do you recall any ads that you dislike or find irritating that would lead you to switch channels? If so, please list the names of the products being advertised or briefly describe what happens in the ad:

_____

_____

_____

_____

_____

_____

On average, how many hours of television do you estimate that you watch each day?

- ☐ 0 – 1 hour
- ☐ 1- 2 hours
- ☐ 2 – 3 hours
- ☐ 3 – 4 hours
- ☐ 4 – 5 hours
- ☐ More than 5 hours

If you have cable TV, what percentage of your viewing time do you estimate that you watch cable?

- ☐ 0 – 25%
- ☐ 26 – 50%
- ☐ 51 – 75%
- ☐ 76 – 100%

Rate yourself as a light, medium or heavy television viewer

- ☐ Light
- ☐ Medium
- ☐ Heavy

Approximately at what age did you fist have regular access to television? _____

Please tick your country of origin

- ☐ Australia
- ☐ Singapore
- ☐ Hong Kong
- ☐ Indonesia
- ☐ Malaysia
- ☐ China
- ☐ Other (please specify) _____

## Appendix 9

### Pilot 1 - Observer Feedback form

Most observation based research requires the observer to complete a feedback form after the observation has been conducted. This gives the researcher additional information on whether there were any problems or events that may have skewed or disrupted the collection of valid data. Furthermore, the observer may provide a personal assessment of the extent to which s(he) was successful in disguising the research to protect the naturalistic nature of the study.

You are required to devise an Observer Feedback Form and complete this form to provide the researchers with additional information that may be valuable to their efforts.

**Appendix 10**

**Observation Exercise – Pilot 2**

Over a period of 30 minutes, you are required to observe the behaviour of one of your household members (10 years or older) watching television. If there are multiple viewers, you should select the person who is most likely to use the remote control.

Your observation is to start between 6pm and 9.30pm. Time your start to coincide with a 30 minute programme so that the person being observed is likely to have time to complete a survey immediately afterwards.

It is important that the person being observed **does not know** that he or she is being watched since this tends to make them self-conscious and may detract from the validity of the results. If necessary, your excuse for writing down information is that you have a university assignment and you are preparing the outline before you start. Sit away from the person that you are observing so that they cannot see what you are writing.

Time at the start of your observation: _____

Room in which observation is to take place _____

Number of functional TV remote control devices in the room? _____

Do you have cable television (Foxtel) in your household? _____

Number of television sets in the household _____

Number of people permanently living in the household _____

*List the person being observed as well as any other viewers in the room:*

| **Viewers over 10 years of age** | **Age** Enter at the end of the survey | **Gender [M or F]** | **Indicate whether each person is a member of household or a visitor** |
|---|---|---|---|
| *Person A (Person being observed)* | | | |
| Person B | | | |
| Person C | | | |
| Person D | | | |

**Measurement of TV viewing behaviour**

This observation task requires that you accurately measure Person A's behaviour during the advertising breaks over a period of 30 minutes. Of particular importance is to keep an accurate record of how long Person A's eyes are on or off the TV screen during the ad breaks.

Look for the best vantage point and preferably sit away from or behind Person A so that he or she is not aware of being observed. If Person A remains in the room during the commercial breaks, your primary recording tasks are as follows:

1. Keep track of the time that Person A's eyes are on or off the screen
2. Keep a record of whether Person A is watching commercials or is viewing programme content on another channel
3. Keep a record of the time that the TV set is tuned to each channel

You should use a watch or a counting system to measure time in seconds. The observation requires that you accurately note how long the television is tuned to each channel. Also be aware of the channel logo's which indicate the channel the viewer has switched to.

**Suggested measurement method**
The start of each ad break represents zero seconds. Using a stopwatch, the second hand of a watch or by counting seconds ("one thousand and one, one thousand and two" etc), you should keep a second by second account of channel and eyes on screen.

The data are to be carefully recorded onto the observation sheet provided. Each ad break contains up to 300 segments each representing 1 second.

**Eyes on screen**
If person A's eyes are on the screen at 'zero seconds' (the start of the ad break, place a tick under "1". If Person A's eyes are not on the screen place a cross under "1". As changes occur in "eyes on screen", place ticks or crosses under the appropriate second that the change takes place.

**Commercial or programme materials**
If the television set is tuned to advertising, including programme promotions, write an "A" into the appropriate block. If the channel is switched and programme material is on screen, write a "P" in the appropriate block.

**Channel to which the TV set is tuned**
Write the channel to which the TV set is tuned in the "1" block and the subsequent channel identification (if necessary) at the time the change occurs.

**End of the ad break**
The second that the viewers return to programme viewing, place an "E" in the appropriate block to show the End of the commercial break.

**Very Important**

This is a challenging task since you are keeping track and noting changes in three variables. It is essential that you conduct a number of trials or practice runs so that you become familiar and competent in this procedure. Only proceed with the survey component once you have collected a valid set of data.

The assignment must be completed on any night between 6pm and 9.30pm between 26 September and 2 October inclusive. All channels will be tape recorded during these times so that the validity of your data can be checked

**Trial observation sheet (photocopy as required)**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 253 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |


| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 253 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |

**Advertising Break 1**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 253 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |

*Now complete the following calculations:*

Total number of seconds with eyes on screen (EOS) viewing commercials on any channel____

Total length of the entire advertising break in seconds ____

Percentage of the total advertising break that the viewing had eos for commercials (on any channel) ___

Total number of seconds with eyes on screen (EOS) viewing programme materials on any channel ____

Percentage of the total advertising break that the viewer had eos for programme materials ___

**Advertising Break 2**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 253 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |

*Now complete the following calculations:*

*Now complete the following calculations:*

Total number of seconds with eyes on screen (EOS) viewing commercials on any channel____

Total length of the entire advertising break in seconds ____

Percentage of the total advertising break that the viewing had eos for commercials (on any channel) ___

Total number of seconds with eyes on screen (EOS) viewing programme materials on any channel ____

Percentage of the total advertising break that the viewer had eos for programme materials ___

**Advertising Break 3**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 |
| 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 |
| 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 253 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |

*Now complete the following calculations:*

Total number of seconds with eyes on screen (EOS) viewing commercials on any channel____

Total length of the entire advertising break in seconds ____

Percentage of the total advertising break that the viewing had eos for commercials (on any channel) ___

Total number of seconds with eyes on screen (EOS) viewing programme materials on any channel ____

Percentage of the total advertising break that the viewer had eos for programme materials ___

**Based on all three advertising breaks taken together:**

Total number of seconds with eyes on screen (EOS) viewing commercials on any channel____

Total length of the entire advertising break in seconds ____

Percentage of the total advertising break that the viewing had eos for commercials (on any channel) ___

Total number of seconds with eyes on screen (EOS) viewing programme materials on any channel ____

Percentage of the total advertising break that the viewer had eos for programme materials

**Appendix 11**

**Survey – Pilot 2**

At this time you can acknowledge that you have been observing Person A's viewing behaviour and you may provide an explanation as follows:

"The university assignment that I am required to do was to observe a household member watching television. I have been noting what programmes you have been watching and have kept track of your channel changes. This is an anonymous survey and therefore your name is not shown anywhere. The survey will take no longer than fifteen minutes to complete".

*(Hand out the self completion questionnaire below to person A and request that he or she complete the survey immediately in a private space)*

## Survey – Pilot 2

Thanks for your time in completing this survey! The aim of this survey is to get your feedback on what you were watching during the past 30 minutes and to gather your views on television. There are no right or wrong answers – only what you remember or your opinions are important.

List all channels that the television was tuned to over the past 30 minutes

_____

1. Which best describes your viewing during the past 30 minutes? *(Please tick all appropriate boxes)*

ڤ I was watching a particular programme
ڤ I watch this programme as often as I can
ڤ I was looking to see if there was anything on that I wanted to watch
ڤ I wanted to watch something and was browsing to see what was on
ڤ I had been watching previously and stayed to see what else was on
ڤ I had nothing better to do and so ended up watching TV
ڤ Other (please specify) _____

2. Did you plan to watch the programme that you have viewed during the past 30 minutes?

ڤ Yes
ڤ No

3. Would you have preferred to watch another programme during the past 30 minutes?

ڤ Yes
ڤ No

4. Estimate how many of the 30 minutes were spent on channels other than the one you were mostly watching:

_____

5. Did you personally use the remote control to make any channel changes during the 30 minute period?

ڤ Yes
ڤ No

6. To what extent was your use of the remote control typical of how you usually switch channels during advertising breaks?

ڤ Much the same as always
ڤ I switched more often than I usually do
ڤ I switched much more often than I usually do
ڤ I switched less often than I usually do
ڤ I switched much less often than I usually do

7. Estimate how many minutes you think that each ad break lasts

_____

8. How many ad breaks do you think there are every half hour?

_____

9. On average, how many ads do you think that there are in each ad break?

_____

10. Rate each of the following in terms of how often they apply to your decision to switch or not to switch channels. There are no right or wrong answers. Only your personal opinions matter. Please note your answer by circling **one** number on each line.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I switch whenever an advertising break comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch only if an irritating ad comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that has been repeated too often | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that I have seen very recently | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if I dislike the commercial | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because there are too many ads on television these days | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch to see what else is on other channels | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch out of habit | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because the ads disrupt the programme that I am watching | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch so that I can watch two programmes at the same time | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch when asked to by others watching with me | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch out of boredom | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch when I have the remote control within my reach | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch when a product is advertised that has nothing to do with me | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch to check a sport score on another channel | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |

11. Given below are some statements about advertising. There are no right or wrong answers. Only your personal opinions matter. Please note your answer by circling **one** number on each line.

| | |
|---|---|
| I like most television advertising | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I don't believe the claims that are made on television ads | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I find most advertising to be annoying | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| Advertising keeps me informed about what to buy | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that advertising is a waste of my time | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| In my opinion, advertising leads to wasteful buying | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that there is far too much advertising on television these days | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is too repetitive | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| Advertising makes it difficult for me to locate programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that advertising interferes with programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| In my opinion, advertising interrupts the programme content | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is boring | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |

| | |
|---|---|
| Rate your overall liking or disliking of television advertising | Very disliked 1 2 3 4 5 6 7 Very liked |
| If you could buy a device that automatically cuts out television advertising, would you consider buying it? | No way 1 2 3 4 5 6 7 Definitely |

12. On average, how many hours of television do you estimate that you watch each day?

ڤ 0 – 1 hour
ڤ 1- 2 hours
ڤ 2 – 3 hours
ڤ 3 – 4 hours
ڤ 4 – 5 hours
ڤ More than 5 hours

13. Indicate your educational status based on the options below:

ڤ Currently at school
ڤ Completed part of all secondary schooling and am not studying further
ڤ Currently enrolled for a degree or diploma
ڤ Completed a Tafe or college diploma
ڤ Completed an undergraduate university degree or diploma
ڤ Completed a post-graduate qualification

14. Rate yourself as a light, medium or heavy television viewer

ڤ Light
ڤ Medium
ڤ Heavy

15. Approximately how old were you when you first had regular access to television?
_____

16. Please tick your country of origin

ڤ Australia
ڤ Singapore
ڤ Hong Kong
ڤ Indonesia
ڤ Malaysia
ڤ China
ڤ Other (please specify) _____

17. *Please answer this question only if you have cable TV in your household.*
What percentage of your viewing time do you estimate that you watch cable?

ڤ 0 – 25%
ڤ 26 – 50%
ڤ 51 – 75%
ڤ 76 – 100%

Thank you for your assistance with this survey

**Appendix 12**

**What do you do during television commercial breaks?**

***Television viewers may watch the commercials during ad breaks or they may engage in other behaviour as well. The purpose of this survey is to find out what you do most often during the commercial breaks.***

Please tick the boxes alongside those activities that you most often do during the TV commercial breaks:

- □ Watch the commercial
- □ Leave the room
- □ Change the channel to see what else is on
- □ Change the channel to avoid the commercials
- □ Change channels to watch another programme at the same time
- □ Change the channel to annoy others in the room
- □ Talk to others in the room
- □ Turn down the sound on the television
- □ Mute the sound on the television
- □ Read something
- □ Use a computer
- □ Doze off
- □ Other (please specify) _____

Please tick your country of origin:

- □ Australia
- □ Singapore
- □ Hong Kong
- □ Indonesia
- □ Malaysia
- □ Other (please specify) _____

**Appendix 13**

**Main Study Notice on Intranet**

**Notice on Blackboard**

The first notice was posted on the university intranet on 30 July 2004 and was available to students from the first day of semester starting 2 August 2004. The aim of this notice was to outline the nature of the task as well as to outline what students could do leading up to the observation exercise.

**Observation Task**

You will be supplied with more information regarding this assessment during class. However, here is a brief overview of the process and expectations for this assignment.

**Objective**

The objective of the observation is to collect data on television viewers' advertising avoidance patterns. Specifically, you are required to monitor viewers' use of the remote control device as well as absence from the television room during prime time television advertising breaks.

You are to observe the members of your household between 24 August and 14 September on four separate occasions. The focus of the observation is on your household viewers during the ad breaks within four 30-minute viewing periods. However, there are a number of very important points in this regard:

The observation is hidden which means that the viewers must not know that they are being observed. You can say that you are doing a uni assignment in which you are determining the timing of product placement within the programmes.
The observation requires a timing device. Preferably use the stop-watch function on your mobile phone. If you do not have a mobile, then use the second hand on your watch.
The observation takes place between 6pm and 10pm (prime time) on four separate occasions. However, there is a limited selection of programmes that you can monitor. These will be supplied to you in class. You should select those programmes from the list that are most likely to be watched by your household group.
It does not matter how many people are watching television on any observation occasion. You are not to influence whether they watch or what they watch. This is a naturalistic enquiry.

What you can do now!

It is important not to arouse suspicion during the observation phase. Therefore, start watching TV in the evenings before the observation phase and pretend to monitor the timing of product placement during programme content. Work with a pad of paper and a timing device. This way, your household members will get used to you working in front of the television set.

**Class exercise**

During class, you will be supplied with the necessary observation sheets and you will be given a number of opportunities to practice the coding system.

**Evaluation of your work**

Your work is evaluated for its thoroughness and the extent to which you have carefully collected data and reported on it. The programmes that you are given to monitor will be tape-recorded to assess the accuracy of your data. You are also required to complete an evaluation form commenting on the quality of your observation and the effectiveness of the research methodology.

This is a valuable piece of observation research and you should get great practical benefit from this experience. Good luck!

**Appendix 14**

**Main Study - Notice to Tutors**

**Message to tutors (9 August, 2004)**

As discussed during the tutors meeting we had just before the start of semester, the individual assignment this semester is an observation exercise coordinated by Steve Dix (email as above).

This is primarily an exercise for the students in observing bahaviours of viewers during commercial breaks on TV. Students are required to record these behaviours as well as answer some brief questions on the topic of "observation". They are therefore required to read and draw on the concepts contained in the chapter on observation in the text (although this chapter will not be covered by the lectures).

Please remind your students that it is important to attend lectures. Instructions and examples on how to complete the exercise will be illustrated during lectures on weeks 2, 3, and 4 of semester. This will contain vital information which will assist them greatly.

Further information/questions should be directed to Steve Dix.

**Appendix 15**

**Main study – Expression of interest**

| Name | Email address | Which two genres are you most likely to observe?<br>Sitcom = S<br>Movie = M<br>News = N<br>Quiz = Q | Which timing device will you use?<br>Mobile = M<br>Watch = W<br>Unsure = U | Outline problems (if any) that you envisage with regard to successfully completing the observation sessions? |
|---|---|---|---|---|
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**Appendix 16**

**Main Study**
**Training of student observers – Session 1**

Video presentation to the observer group establishing objectives and key issues

The second point of contact occurred on 10 August when student observers were shown a video clip, further outlining the task. The video consisted of a talking head and lasted for 5 minutes and 14 seconds. A transcript of the presentation was given to the observers as a review for the session.

A transcript of the session follows:

The assignment is an observation of a household watching television. Your job is to watch your family or household member watching television to determine the extent to which they are avoiding television commercials using a remote control device. This a process called zapping – when one zaps out during the ad break into other channels. We want to research the extent to which we are using the remote control device and how much of the advertising break are we avoiding? This is obviously a concern to advertisers because they are paying for that advertising time.

This is an observation exercise which requires you to go back into your households and observe the behaviour of your household members. It's a hidden observation which means that the people you are observing must not know they are being observed. Your job is to pretend that you are doing something else. An excuse that you might use is that you are doing a university assignment in which you are tracking the timing of product placements on television programmes. So, you would then raise no suspicion of why you're in front of the television with a pad of paper and a timing device.

There is a process of collecting data over four occasions. On four separate occasions, you are going to observe your household members watching television. Those four occasions are based on a selection within four different television genres. You can choose first either a movie which is on channels 7, 9 or 10 which is on a Friday, Saturday or Sunday night. Secondly, you can choose a news broadcast at 6pm on either channel Seven or Nine. Thirdly, you can choose a sitcom – your choice is between Friends (Channel 9), My Wife and Kids (Channel 7) or Two and a Half Men (Channel 9). The fourth genre you can choose from is a game/quiz show and the only choice is 'Who wants to be a Millionaire'

You have to choose two or these four genres and you have to observe your household members on two occasions within each of those genres. For example, you may select Friends and watch your household members watching Friends on two separate occasions. The other one may be news and you should watch your household members watching news on two separate occasions.

Of course, there is a coding system which I will introduce the next time that we speak on which you mark down exactly who used the remote control at what time. The timing is important and I suggest that you use either a stop watch function on your mobile phone or the second hand of your watch. You have to be able to map time out in seconds.

There are a couple of key things that you have to be aware of. I suggest that you check whether you have got the stop watch facility on your mobile phone. Secondly, start watching television and have a pen and paper in front of you so that your household members get used to the idea that you are watching TV and that you are monitoring product placements which is a task that you have for university. So when the observation period comes up, you won't be regarded with any suspicion. The observation period is between 24 August and 14 September. The assignment is due on 17 September. Within the three week observation period, your job is to monitor your household on four different occasions within two selected genres. So, check out at this stage what kinds of programmes they watch regularly to make the selection. By time you are ready to observe them, you'll know what programmes they are most likely to watch.

The next time that we speak, I'll be talking about the coding process and I will give you two opportunities to practice the coding to make sure that you grasp the correct rules and use the time slots correctly.

The evaluation of this exercise is based on the accuracy and the thoroughness with which you complete this task. We are going to be tape recording the exact programmes that you are going to be monitoring and therefore, we can check back and see whether your data is reflective of the actual event. The second thing that you are going to have to do is complete the feedback sheet and comment on how the assignment went, whether this type of research was appropriate for this environment and whether there were any sources of error or if any problems cropped up that impact the task.

Good luck on this very practical assignment which gives you the opportunity to experience the observation research environment as the observer. It gives you an appreciation of the intricacies and issues that confront the marketing researcher in an observation environment, particularly a hidden observation environment which is called a naturalistic enquiry.

I will speak to you next week and we will commence the coding exercises.

**Appendix 17**

**Main Study**
**Training of student observers – Session 2**

Video presentation to observer group for coding practice

The second point of contact occurred on 17 August, 2004 in which student observers started the first of two training sessions. This session is supported with the handout of guidelines for the observer. This comprises a thirteen page document that contains guidelines as well as practice coding sheets for the observation exercise.

Transcript for Session 2

## Coding the Observation Session

This outlines what you must be aware of in order to correctly code the observation.

The observation sheet is categorised second by second for a period of five minutes. It is likely that the ad break is between 2 and 4 minutes long, so you may not require the entire sheet.

Keep in mind that within 30 minutes of viewing time, there are likely to be two or three ad breaks. You are possibly going to have three observations within each viewing period. Remember from last time that there are four viewing periods in total broken up into two genres of two each. So, you will be observing people over four occasions of thirty minutes each and your focus is on the two or three ads breaks within those periods.

Here is what you do on each occasion. Firstly, if you household members are watching channel 7, that means that on the second that the ad break starts, you're going to write a "7" into the first block to indicate the channel that they are viewing. You will also set your stop watch or timing device to monitor the seconds that go by. Let's assume that in the tenth second, somebody changes the channel to Channel 9. Now who is that somebody? Well each person is given a letter to indicate who they are. So, the oldest person is person A, the second oldest is person B, the third oldest is person C and so on (Once you have allocated this letter to each person, keep the same letter for each person in later observations). Let's assume that person A changes to channel 9 in the tenth second. Write "9A" into the tenth second coding block. This shows that Person A changed to Channel 9 in the tenth second.

The next thing to note is whether anyone mutes the television during the ad breaks. If a muting takes place, you indicate that by a capital M. Then after the "M" you put the letter corresponding to the person who has done the muting. So let's say that person B, in the fifteenth second, picks up the remote control and mutes the television set. You will then write down "MB"

under the fifteenth second. If person B later removes the mute, then write "MB" again to show that the mute function is off.

If someone leaves the room during the ad break, you must indicate that that person has left by using a small letter (a, b, c, d, or e) to correspond to the person who has just left the room. So if person C leaves the room in the eighteenth second, then under the '18', you will write "c" to show that person has left the room. If that person comes back, let's say ten seconds later in the 28th second, you will write another "c" in the block under "28" to show they have returned

Finally, you indicate that the ad break has ended by means of an "E". Or if the viewers only come back to the programme after the ad break is over, then write a "P" to indicate that they are now back into the programme. In this case, you won't know exactly what time the ad break has ended.

The coding process is all about looking at specific channels that the household is watching and monitoring any changes that are taking place under the correct second allocation to show that the channel has changed or someone has left the room or has muted the television set.

**Appendix 18**

**Main Study - Observation Exercise Trial Worksheets**

You are required to observe the behaviour of your household members (15 years or older) during television advertising breaks.

Each observation is over a period of 30 minutes and is conducted on four different viewing occasions. More specifically, you should observe the viewers on two different occasions for each of two selected programme genres. You may select your programmes from the following list:

| Programme Genre | Programme | Day/Channel |
|---|---|---|
| News | 6pm news<br>6pm news | Mon – Fri, Channel 7<br>Mon – Fri, Channel 9 |
| Movie | Friday, Saturday or Sunday movie | Channel 7, 9 or 10 |
| Sitcom | Friends<br>Two and a half men<br>My wife and kids | Monday channel 9<br>Monday channel 9<br>Sunday, Wednesday 7 |
| Game show/Quiz | Millionaire | Monday 9 |

For example, if your household regularly watches Seven/Nine News and Friends (Sitcom), then you can observe their viewing behaviour on two different occasions for each of these programme selections.

| | Viewing occasion 1 | Viewing occasion 2 |
|---|---|---|
| **Seven / Nine News** | **X** | **X** |
| **Friends** | **X** | **X** |

You have a three-week period over which to conduct the research. If you have selected Friends as your sitcom, then both observations should preferably come from that same programme. Try not to mix and match the sitcom options. However, any movie or any news programme can be selected.

*Note that each 30 minute observation is to take place between 6pm and 10pm over a period of three weeks between 24 August and 14 September 2004.*

***Disguised Observation***

It is important that the viewers being observed **are not aware** that they are being observed since this tends to make them self-conscious and may detract from the validity of the results. If necessary, your excuse for writing down information is that you have a university assignment. If they want to know what it's on, you can say that you are monitoring the timing of product placements within programme content.

***Preparing for the observation***

Decide where you will sit during the observation. It is preferable that you sit away from the viewers so that you attract as little attention as possible. For example, you may sit in an adjoining room or on a single chair. You should have a full view of both the TV screen as well as the viewer group. However, if you are observing a single viewer, don't arouse suspicion by sitting too far away. Rather sit where you would usually sit in relation to that person.

***The Observation sheet***

The data are to be carefully recorded onto the observation sheet provided. Each data sheet contains five minutes of recording space divided into 'seconds'. Since most ad breaks are between 2 and 3 minutes long, you may not need to use the entire space allocation.

***Measurement of television viewing behaviour***

All advertising breaks during the 30 minute interval are to be monitored. The observation starts the second that the advertising break begins. You should preferably use the stopwatch function on your mobile phone or a watch that measures time in seconds.

You are required to track five variables:

The channel that the TV is tuned to
Who (If anyone) uses the remote control to switch channels
Who (if anyone) uses the remote control to mute the sound
Who (if anyone) leaves or returns to the viewing room and when
When the programme returns to normal viewing

*The channel that the TV is tuned to*

Write the programme channel to which the TV set is tuned in the "1" block at the start of the advertising break and then note any subsequent channel identification (as necessary) at the time the change occurs.

On the time sheet supplied, write the number of the channel under the second on which the switch is made. Be aware of the channel logo on the TV screen which indicates the channel number the viewer has switched to.

*Who (If anyone) uses the remote control to switch channels*

Each person in the room is identified by a letter (A, B, C, D, E). Write down the <u>capital letter</u> (under the time in which the switch occurred) to indicated which person has changed channels during the advertising break. For

example, if person A switches to channel 9, then write “9A” in the appropriate time slot.

*Who (if anyone) uses the remote control to mute the sound*

If the sound is muted on the television set, write down an “M” under the second that it took place. Also write the capital letter after the “M” to indicate which person muted the sound. For example, MA means that person A has muted the sound.

*Who (if anyone) leaves or returns to the viewing room and when*

Write the letter in lower case (under the appropriate time) if a person leaves the viewing room. If they return within the ad break period, write the letter again (in lower case) at the time of their return.

*When the programme returns to normal viewing*

The second that the programme returns to normal programme viewing, place an “E” in the appropriate block to indicate the **E**nd of the commercial break. If the viewers only return to the programme after the ad break has finished, place a “P” in the relevant time block to show that they are back to the **Programme** content. If this occurs, you will not know the exact time that the ad break ended and the “E” symbol will not appear on your coding sheet.

**Practice observation exercise**

You will be given the opportunity to practice this observation exercise in class on two occasions. Prior to starting the actual observation, conduct two further practice sessions in your home environment. It is essential that you become familiar with the process and competent in this procedure before you begin to record your observations.

Remember that the observations must be completed between 6pm and 10pm between 24 August to 14 September inclusive. All channels will be tape recorded during these times to check the validity of your data.

***The survey questionnaire***

Only hand out the questionnaire immediately after the fourth (final) observation. These are only given to those viewers who were present for some or all of the final viewing period. You can inform the viewers that they have been observed and then give them the option to complete the questionnaire. An information sheet is included in the pack to confirm the authenticity of the research. Remind respondents that it is an anonymous survey – at no stage are they asked to give their name.

**If you unsure of how to do any part of this assignment or if you require assistance with the observation, contact Steve Dix on 9266 7246 or steve.dix@cbs.curtin.edu.au**

**Trial Observation 1**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 1:00 |
| 1:01 | 1:02 | 1:03 | 1:04 | 1:05 | 1:06 | 1:07 | 1:08 | 1:09 | 1:10 | 1:11 | 1:12 | 1:13 | 1:14 | 1:15 | 1:16 | 1:17 | 1:18 | 1:19 | 1:20 |
| 1:21 | 1:22 | 1:23 | 1:24 | 1:25 | 1:26 | 1:27 | 1:28 | 1:29 | 1:30 | 1:31 | 1:32 | 1:33 | 1:34 | 1:35 | 1:36 | 1:37 | 1:38 | 1:39 | 1:40 |
| 1:41 | 1:42 | 1:43 | 1:44 | 1:45 | 1:46 | 1:47 | 1:48 | 1:49 | 1:50 | 1:51 | 1:52 | 1:53 | 1:54 | 1:55 | 1:56 | 1:57 | 1:58 | 1:59 | 2:00 |
| 2:01 | 2:02 | 2:03 | 2:04 | 2:05 | 2:06 | 2:07 | 2:08 | 2:09 | 2:10 | 2:11 | 2:12 | 2:13 | 2:14 | 2:15 | 2:16 | 2:17 | 2:18 | 2:19 | 2:20 |
| 2:21 | 2:22 | 2:23 | 2:24 | 2:25 | 2:26 | 2:27 | 2:28 | 2:29 | 2:30 | 2:31 | 2:32 | 2:33 | 2:34 | 2:35 | 2:36 | 2:37 | 2:38 | 2:39 | 2:40 |
| 2:41 | 2:42 | 2:43 | 2:44 | 2:45 | 2:46 | 2:47 | 2:48 | 2:49 | 2:50 | 2:51 | 2:52 | 2:53 | 2:54 | 2:55 | 2:56 | 2:57 | 2:58 | 2:59 | 3:00 |
| 3:01 | 3:02 | 3:03 | 3:04 | 3:05 | 3:06 | 3:07 | 3:08 | 3:09 | 3:10 | 3:11 | 3:12 | 3:13 | 3:14 | 3:15 | 3:16 | 3:17 | 3:18 | 3:19 | 3:20 |
| 3:21 | 3:22 | 3:23 | 3:24 | 3:25 | 3:26 | 3:27 | 3:28 | 3:29 | 3:30 | 3:31 | 3:32 | 3:33 | 3:34 | 3:35 | 3:36 | 3:37 | 3:38 | 3:39 | 3:40 |
| 3:41 | 3:42 | 3:43 | 3:44 | 3:45 | 3:46 | 3:47 | 3:48 | 3:49 | 3:50 | 3:51 | 3:52 | 3:53 | 3:54 | 3:55 | 3:56 | 3:57 | 3:58 | 3:59 | 4:00 |
| 4:01 | 4:02 | 4:03 | 4:04 | 4:05 | 4:06 | 4:07 | 4:08 | 4:09 | 4:10 | 4:11 | 4:12 | 4:13 | 4:14 | 4:15 | 4:16 | 4:17 | 4:18 | 4:19 | 4:20 |
| 4:21 | 4:22 | 4:23 | 4:24 | 4:25 | 4:26 | 4:27 | 4:28 | 4:29 | 4:30 | 4:31 | 4:32 | 4:33 | 4:34 | 4:35 | 4:36 | 4:37 | 4:38 | 4:39 | 4:40 |
| 4:41 | 4:42 | 4:43 | 4:44 | 4:45 | 4:46 | 4:47 | 4:48 | 4:49 | 4:50 | 4:51 | 4:52 | 4:53 | 4:54 | 4:55 | 4:56 | 4:57 | 4:58 | 4:59 | 5:00 |

**Analysis Sheet – Trial Observation 1**

A. Complete the following table in relation to number of seconds that the television set was tuned to specific channels:

| ***Column A*** | ***Column B*** | ***Column C*** |
|---|---|---|
| **Channel** | **How many seconds was the TV tuned to each channel during the ad break?** ***** See note below** | **How many seconds (of those listed in column B) were muted?** |
| ABC | | |
| Channel 7 | | |
| Channel 9 | | |
| Channel 10 | | |
| SBS | | |
| Foxtel | | |
| **Total** | | |

****** If the viewers only return to the programme after the ad break has finished, then you should account for all time that has been expended up to the "P" symbol***

B. Complete the following table in relation to viewers leaving the room during the advertising break

| Person | Did this person leave the room during the ad break? | How many seconds was that person out of the viewing room during the ad break? |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |
| E | | |

## Overall analysis of all Trial Observations

A. Based on as many observations as you have done during the trial phase, complete the following table

| Column A | Column B | Column C | Column D |
|---|---|---|---|
| | **Total length of ad break in seconds** **(or best estimate if viewers return after ad break has ended)** | **Total time spent on channels <u>other than</u> the programme channel (in seconds)** | **Time spent on other channels as a % of total ad time** **<u>Col C</u> x 100** **Col B** |
| Trial Observation 1 | | | |
| Trial Observation 2 | | | |
| Trial Observation 3 | | | |
| Trial Observation 4 | | | |
| **Total of columns** | | | |

B. Complete the following table by noting how many seconds each person spends out of the viewing room during each observation session and compute the total

| | **Person A** | **Person B** | **Person C** | **Person D** | **Person E** |
|---|---|---|---|---|---|
| Trial Observation 1 | | | | | |
| Trial Observation 2 | | | | | |
| Trial Observation 3 | | | | | |
| Trial Observation 4 | | | | | |
| **Total** | | | | | |

**Appendix 19**

**Main Study - Training of Observers Session 3**

**Video presentation to observer group for second coding practice opportunity**

This took place on 24 August. Observers were familiar with the coding process and were afforded a second opportunity to code a pre-recorded viewing environment. A solution was provided after the event so that observers could evaluate the accuracy of their work.

**Transcript 3**

There are a few key things that you should bear in mind for the actual observation. Remember that you should only observe viewers 15 years or older.

Each person in your household should be allocated a letter. So, for example, the oldest can be person A, the second oldest is Person B and so on. Once you have allocated these letters, make sure that you are consistent from one observation phase to the next. For example, Person A must stay 'person A' for all observation sessions.

There a number of survey questionnaires that are handed out at the end – after the fourth and final observation. When you hand these out, ensure again that the correct person gets the correct questionnaire. Each of the questionnaires are marked "person A, B, C, D or E" – so make sure that each one is given to the appropriate person. (Only those present in the final observation session should complete Section A of the questionnaire).

You should only start observing once the programme begins. Don't observe the ads before the programme starts – only once the programme begins do you start the monitoring phase. The first ad break embedded into that programme is the first ad break that you will observe.

It may be that there are two or three ad breaks within the 30 minute period. However many there are is the number that you observe. The coding sheets have provision for up to three ad breaks but you may only need to use two of these in some observation sessions.

If there is no channel switching during a particular phase of observation, it is not considered to be a "failure". This information is as valuable as a phase where viewers do use the remote. Since one of the objectives of the study is to determine the extent of channel switching behaviour, any use of non-use of the remote is relevant information.

You may have a situation in which viewers are doing other things while the ad break is on. For example, they may be reading or sleeping. This information is not recorded. You only need to record channel switching, muting or leaving the room.

It may happen (particularly when you're observing a single person) that the viewer(s) speak to you during the ad break. Since you are part of the viewing group, its OK for you to converse with that person during the ad break – as would normally happen. The problem comes in when one person speaks to you while another changes channel. Use your discretion as how best to handle that situation without letting on that you are observing them. If necessary, you can terminate that session. It may also happen that your mobile phone rings while you are observing a session. If you have to abort a session, have a back-up plan so that, if you do have one or two sessions that don't work out, you should have other opportunities within the three-week observation session to make up for those sessions that did not work out.

**Final key points**

1. Check out your specific television system in advance. Confirm that the channel number is displayed on the screen as the channel changes when you press the channel number as well as when you press the programme forward (or back) button.
2. It may not be possible to write down changes that take place too rapidly. If a viewer makes a series of very quick channel changes, wait until they settle on a channel and record only the final channel selected.
3. *Remember that all the programmes will be tape-recorded to confirm the accuracy of your observation data.*

**Appendix 20**

**Main Study - Frequently Asked Questions**

**Do I have to observe the same people in every observation?**

You do not need to observe the same people - whoever happens to be in the viewing room for the selected programme is who you observe.

**Do I have to give the questionnaire to the persons in the previous 3 observations or just in the 4th observation?**

You give a questionnaire to all those you have observed in any previous observation. However, only those at the final observation complete both Sections A and B. Hand them the questionnaire immediately after the final observation. Those who were at previous observations (but not at the final observations) complete only Section B. Hand them the questionnaire as soon as possible after the final observation.

**For the Movie genre, what if the movie goes up to 2hours? Should I take any 30 mins of the 2-hour duration to conduct my observation or the whole stretch?**

You can take any 30min period of the movie. Probably the first 30 mins would work best.

**Should the observation be done in the three consecutive weeks? Or can I do all the 4 observation within 1week if possible?**

You can do all four in one week unless you're opted for a weekly sitcom.

**What if my observation consists of more than 5 people? I'm staying on campus with 7 other house-mates.**

Focus only on 5 of the 7 people. You can ignore the other two.

**What if the observation involves people who talk during ad breaks, or answer a phone call though they do not leave the area or zap channels?**

You only concern yourself with zapping and room leaving. However, you can make comment about these other issues in the feedback form.

**What if a person never was in the observation but she only appears at the second ad break? Or what if the person left but never returns?**

You can ignore someone who was not there from the start. If someone leaves the room, place a small letter corresponding to their name at the relevant time. No further coding will indicate that they have not returned.

**What if during the observation, the person decides to switch off the TV before the 30mins observation ends?**

If they stop watching and you have not had a chance to analyse all the ad breaks, you will have to abort the session and start again.

**Are there any new programmes that can be observed?**

In the quiz genre, you can also observe during the prime-time episode of 'Deal or No Deal'. In the Sitcom genre, you can also observe Everyone Loves Raymond.

**When does the observation period start and end?**

The dates have been shifted to start on 30 August and to end on 21 September.

**When and where do I hand the assignment in?**

The submission date is 24 September, 2004. The assignments should be posted into your tutor's pigeon hole by 5pm on 24 September.

**How do I allocate each person's identification letter?**

Give each person a letter (A, B, C, D or E) before you start the observation process and make sure that each person keeps that letter throughout the series of observations. Also ensure that each person is given the correct survey to complete at the end of the final observation session.

**What if there is only one household member?**

That's fine. You can observe a single person's viewing behaviour.

**What if I don't have a television set or if I live alone?**

You can observe at a friend or relative's home if you do not have access to television or if you live alone.

**What if my household members do not watch the programmes that have been specified?**

You can either observe at a friend/relative's house or you can set up your household member(s) to watch the selected programmes. You can tell them that you're doing this as part of an assignment but don't be too specific about exactly what you're monitoring. Tell them that they should watch TV as they usually would. This means that the observation is not fully hidden but you will still get the necessary data.

**Can I observe more than one household?**

Yes, you can as long as you observe no more than five members in total. Also, do not mix up the genres. For example, household A may be observed for News while household B is observed for Sitcoms.

**What happens if <u>all</u> the viewers stop viewing the programme being observed?**

You will have to abort this observation and do another at a later time. You are required to observe for a continuous period of 30 minutes. However, if one or more of the group leave and don't come back, you can always continue with the remaining members.

**What happens if someone comes into the room for the first time during one of the commercial breaks?**

Make a note of that person's entry by means of a small letter corresponding to their name. Write an explanatory note onto the observation sheet after the event to explain what has happened.

**Should I include theory into the student assessment at the end of the observation?**

You can read the relevant section in the textbook to get a theoretical perspective on the topic of observation. However, in answering the questions posed, you should take a practical slant and, where necessary, support your position with relevant theory.

**Appendix 21**

**Main Study – Observation Exercise Worksheets**

Details of Observation 1

Date of the observation _____

Name of programme being observed _____

Time at the start of your observation _____

Room in which observation is to take place _____

Number of functional TV remote control devices in the room? _____

Do you have cable television (Foxtel) in your household? _____

Number of television sets in the household _____

Number of people permanently living in the household _____

*List all viewers in the room at the start of the observation period:*

| **Viewers over 15 years of age** | **Age** **Enter at the end of the final survey** | **Gender** | **Indicate whether each person is a member of household or a visitor** |
|---|---|---|---|
| Person A | | | |
| Person B | | | |
| Person C | | | |
| Person D | | | |
| Person E | | | |

**Advertising Break 1, Observation 1 (Note the approximate time** *e.g. 9.15pm* **that this ad break has ended ____:_____ )**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 1:00 |
| 1:01 | 1:02 | 1:03 | 1:04 | 1:05 | 1:06 | 1:07 | 1:08 | 1:09 | 1:10 | 1:11 | 1:12 | 1:13 | 1:14 | 1:15 | 1:16 | 1:17 | 1:18 | 1:19 | 1:20 |
| 1:21 | 1:22 | 1:23 | 1:24 | 1:25 | 1:26 | 1:27 | 1:28 | 1:29 | 1:30 | 1:31 | 1:32 | 1:33 | 1:34 | 1:35 | 1:36 | 1:37 | 1:38 | 1:39 | 1:40 |
| 1:41 | 1:42 | 1:43 | 1:44 | 1:45 | 1:46 | 1:47 | 1:48 | 1:49 | 1:50 | 1:51 | 1:52 | 1:53 | 1:54 | 1:55 | 1:56 | 1:57 | 1:58 | 1:59 | 2:00 |
| 2:01 | 2:02 | 2:03 | 2:04 | 2:05 | 2:06 | 2:07 | 2:08 | 2:09 | 2:10 | 2:11 | 2:12 | 2:13 | 2:14 | 2:15 | 2:16 | 2:17 | 2:18 | 2:19 | 2:20 |
| 2:21 | 2:22 | 2:23 | 2:24 | 2:25 | 2:26 | 2:27 | 2:28 | 2:29 | 2:30 | 2:31 | 2:32 | 2:33 | 2:34 | 2:35 | 2:36 | 2:37 | 2:38 | 2:39 | 2:40 |
| 2:41 | 2:42 | 2:43 | 2:44 | 2:45 | 2:46 | 2:47 | 2:48 | 2:49 | 2:50 | 2:51 | 2:52 | 2:53 | 2:54 | 2:55 | 2:56 | 2:57 | 2:58 | 2:59 | 3:00 |
| 3:01 | 3:02 | 3:03 | 3:04 | 3:05 | 3:06 | 3:07 | 3:08 | 3:09 | 3:10 | 3:11 | 3:12 | 3:13 | 3:14 | 3:15 | 3:16 | 3:17 | 3:18 | 3:19 | 3:20 |
| 3:21 | 3:22 | 3:23 | 3:24 | 3:25 | 3:26 | 3:27 | 3:28 | 3:29 | 3:30 | 3:31 | 3:32 | 3:33 | 3:34 | 3:35 | 3:36 | 3:37 | 3:38 | 3:39 | 3:40 |
| 3:41 | 3:42 | 3:43 | 3:44 | 3:45 | 3:46 | 3:47 | 3:48 | 3:49 | 3:50 | 3:51 | 3:52 | 3:53 | 3:54 | 3:55 | 3:56 | 3:57 | 3:58 | 3:59 | 4:00 |
| 4:01 | 4:02 | 4:03 | 4:04 | 4:05 | 4:06 | 4:07 | 4:08 | 4:09 | 4:10 | 4:11 | 4:12 | 4:13 | 4:14 | 4:15 | 4:16 | 4:17 | 4:18 | 4:19 | 4:20 |
| 4:21 | 4:22 | 4:23 | 4:24 | 4:25 | 4:26 | 4:27 | 4:28 | 4:29 | 4:30 | 4:31 | 4:32 | 4:33 | 4:34 | 4:35 | 4:36 | 4:37 | 4:38 | 4:39 | 4:40 |
| 4:41 | 4:42 | 4:43 | 4:44 | 4:45 | 4:46 | 4:47 | 4:48 | 4:49 | 4:50 | 4:51 | 4:52 | 4:53 | 4:54 | 4:55 | 4:56 | 4:57 | 4:58 | 4:59 | 5:00 |

*Complete the following only after the 30 minute observation phase is over (Break 1; Observation 1)*

A. Complete the following table in relation to number of seconds that the television set was tuned to specific channels:

| ***Column A*** | ***Column B*** | ***Column C*** |
|---|---|---|
| **Channel** | **How many seconds was the TV tuned to each channel during the ad break?** ***** See note below** | **How many seconds (of those listed in column B) were muted?** |
| ABC | | |
| Channel 7 | | |
| Channel 9 | | |
| Channel 10 | | |
| SBS | | |
| Foxtel | | |
| **Total** | | |

****** If the viewers return to the programme after the ad break has finished, then you should account for all time that has been expended up to the "P" symbol***

B. Complete the following table in relation to viewers leaving the room during the advertising break

| Person | Did this person leave the room during the ad break? | How many seconds was that person out of the viewing room during the ad break? |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |
| E | | |

**Advertising Break 2, Observation 1** **(Note the approximate time** *e.g. 9.15pm* **that this ad break has ended ____:_____ )**

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 1:00 |
| 1:01 | 1:02 | 1:03 | 1:04 | 1:05 | 1:06 | 1:07 | 1:08 | 1:09 | 1:10 | 1:11 | 1:12 | 1:13 | 1:14 | 1:15 | 1:16 | 1:17 | 1:18 | 1:19 | 1:20 |
| 1:21 | 1:22 | 1:23 | 1:24 | 1:25 | 1:26 | 1:27 | 1:28 | 1:29 | 1:30 | 1:31 | 1:32 | 1:33 | 1:34 | 1:35 | 1:36 | 1:37 | 1:38 | 1:39 | 1:40 |
| 1:41 | 1:42 | 1:43 | 1:44 | 1:45 | 1:46 | 1:47 | 1:48 | 1:49 | 1:50 | 1:51 | 1:52 | 1:53 | 1:54 | 1:55 | 1:56 | 1:57 | 1:58 | 1:59 | 2:00 |
| 2:01 | 2:02 | 2:03 | 2:04 | 2:05 | 2:06 | 2:07 | 2:08 | 2:09 | 2:10 | 2:11 | 2:12 | 2:13 | 2:14 | 2:15 | 2:16 | 2:17 | 2:18 | 2:19 | 2:20 |
| 2:21 | 2:22 | 2:23 | 2:24 | 2:25 | 2:26 | 2:27 | 2:28 | 2:29 | 2:30 | 2:31 | 2:32 | 2:33 | 2:34 | 2:35 | 2:36 | 2:37 | 2:38 | 2:39 | 2:40 |
| 2:41 | 2:42 | 2:43 | 2:44 | 2:45 | 2:46 | 2:47 | 2:48 | 2:49 | 2:50 | 2:51 | 2:52 | 2:53 | 2:54 | 2:55 | 2:56 | 2:57 | 2:58 | 2:59 | 3:00 |
| 3:01 | 3:02 | 3:03 | 3:04 | 3:05 | 3:06 | 3:07 | 3:08 | 3:09 | 3:10 | 3:11 | 3:12 | 3:13 | 3:14 | 3:15 | 3:16 | 3:17 | 3:18 | 3:19 | 3:20 |
| 3:21 | 3:22 | 3:23 | 3:24 | 3:25 | 3:26 | 3:27 | 3:28 | 3:29 | 3:30 | 3:31 | 3:32 | 3:33 | 3:34 | 3:35 | 3:36 | 3:37 | 3:38 | 3:39 | 3:40 |
| 3:41 | 3:42 | 3:43 | 3:44 | 3:45 | 3:46 | 3:47 | 3:48 | 3:49 | 3:50 | 3:51 | 3:52 | 3:53 | 3:54 | 3:55 | 3:56 | 3:57 | 3:58 | 3:59 | 4:00 |
| 4:01 | 4:02 | 4:03 | 4:04 | 4:05 | 4:06 | 4:07 | 4:08 | 4:09 | 4:10 | 4:11 | 4:12 | 4:13 | 4:14 | 4:15 | 4:16 | 4:17 | 4:18 | 4:19 | 4:20 |
| 4:21 | 4:22 | 4:23 | 4:24 | 4:25 | 4:26 | 4:27 | 4:28 | 4:29 | 4:30 | 4:31 | 4:32 | 4:33 | 4:34 | 4:35 | 4:36 | 4:37 | 4:38 | 4:39 | 4:40 |
| 4:41 | 4:42 | 4:43 | 4:44 | 4:45 | 4:46 | 4:47 | 4:48 | 4:49 | 4:50 | 4:51 | 4:52 | 4:53 | 4:54 | 4:55 | 4:56 | 4:57 | 4:58 | 4:59 | 5:00 |

*Complete the following only after the 30 minute observation phase is over (Break 2; Observation 1)*

A. Complete the following table in relation to number of seconds that the television set was tuned to specific channels:

| ***Column A*** | ***Column B*** | ***Column C*** |
|---|---|---|
| **Channel** | **How many seconds was the TV tuned to each channel during the ad break?** ***** See note below** | **How many seconds (of those listed in column B) were muted?** |
| ABC | | |
| Channel 7 | | |
| Channel 9 | | |
| Channel 10 | | |
| SBS | | |
| Foxtel | | |
| **Total** | | |

****** If the viewers return to the programme after the ad break has finished, then you should account for all time that has been expended up to the "P" symbol***

B. Complete the following table in relation to viewers leaving the room during the advertising break

| Person | Did this person leave the room during the ad break? | How many seconds was that person out of the viewing room during the ad break? |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |
| E | | |

**Advertising Break 3, Observation 1** **(Note the approximate time** *e.g. 9.15pm* **that this ad break has ended ____:_____ )**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 1:00 |
| 1:01 | 1:02 | 1:03 | 1:04 | 1:05 | 1:06 | 1:07 | 1:08 | 1:09 | 1:10 | 1:11 | 1:12 | 1:13 | 1:14 | 1:15 | 1:16 | 1:17 | 1:18 | 1:19 | 1:20 |
| 1:21 | 1:22 | 1:23 | 1:24 | 1:25 | 1:26 | 1:27 | 1:28 | 1:29 | 1:30 | 1:31 | 1:32 | 1:33 | 1:34 | 1:35 | 1:36 | 1:37 | 1:38 | 1:39 | 1:40 |
| 1:41 | 1:42 | 1:43 | 1:44 | 1:45 | 1:46 | 1:47 | 1:48 | 1:49 | 1:50 | 1:51 | 1:52 | 1:53 | 1:54 | 1:55 | 1:56 | 1:57 | 1:58 | 1:59 | 2:00 |
| 2:01 | 2:02 | 2:03 | 2:04 | 2:05 | 2:06 | 2:07 | 2:08 | 2:09 | 2:10 | 2:11 | 2:12 | 2:13 | 2:14 | 2:15 | 2:16 | 2:17 | 2:18 | 2:19 | 2:20 |
| 2:21 | 2:22 | 2:23 | 2:24 | 2:25 | 2:26 | 2:27 | 2:28 | 2:29 | 2:30 | 2:31 | 2:32 | 2:33 | 2:34 | 2:35 | 2:36 | 2:37 | 2:38 | 2:39 | 2:40 |
| 2:41 | 2:42 | 2:43 | 2:44 | 2:45 | 2:46 | 2:47 | 2:48 | 2:49 | 2:50 | 2:51 | 2:52 | 2:53 | 2:54 | 2:55 | 2:56 | 2:57 | 2:58 | 2:59 | 3:00 |
| 3:01 | 3:02 | 3:03 | 3:04 | 3:05 | 3:06 | 3:07 | 3:08 | 3:09 | 3:10 | 3:11 | 3:12 | 3:13 | 3:14 | 3:15 | 3:16 | 3:17 | 3:18 | 3:19 | 3:20 |
| 3:21 | 3:22 | 3:23 | 3:24 | 3:25 | 3:26 | 3:27 | 3:28 | 3:29 | 3:30 | 3:31 | 3:32 | 3:33 | 3:34 | 3:35 | 3:36 | 3:37 | 3:38 | 3:39 | 3:40 |
| 3:41 | 3:42 | 3:43 | 3:44 | 3:45 | 3:46 | 3:47 | 3:48 | 3:49 | 3:50 | 3:51 | 3:52 | 3:53 | 3:54 | 3:55 | 3:56 | 3:57 | 3:58 | 3:59 | 4:00 |
| 4:01 | 4:02 | 4:03 | 4:04 | 4:05 | 4:06 | 4:07 | 4:08 | 4:09 | 4:10 | 4:11 | 4:12 | 4:13 | 4:14 | 4:15 | 4:16 | 4:17 | 4:18 | 4:19 | 4:20 |
| 4:21 | 4:22 | 4:23 | 4:24 | 4:25 | 4:26 | 4:27 | 4:28 | 4:29 | 4:30 | 4:31 | 4:32 | 4:33 | 4:34 | 4:35 | 4:36 | 4:37 | 4:38 | 4:39 | 4:40 |
| 4:41 | 4:42 | 4:43 | 4:44 | 4:45 | 4:46 | 4:47 | 4:48 | 4:49 | 4:50 | 4:51 | 4:52 | 4:53 | 4:54 | 4:55 | 4:56 | 4:57 | 4:58 | 4:59 | 5:00 |

*Complete the following only after the 30 minute observation phase is over (Break 3; Observation 1)*

A. Complete the following table in relation to number of seconds that the television set was tuned to specific channels:

| ***Column A*** | ***Column B*** | ***Column C*** |
|---|---|---|
| **Channel** | **How many seconds was the TV tuned to each channel during the ad break?** ***** See note below** | **How many seconds (of those listed in column B) were muted?** |
| ABC | | |
| Channel 7 | | |
| Channel 9 | | |
| Channel 10 | | |
| SBS | | |
| Foxtel | | |
| **Total** | | |

****** If the viewers return to the programme after the ad break has finished, then you should account for all time that has been expended up to the "P" symbol***

B. Complete the following table in relation to viewers leaving the room during the advertising break

| Person | Did this person leave the room during the ad break? | How many seconds was that person out of the viewing room during the ad break? |
|---|---|---|
| A | | |
| B | | |
| C | | |
| D | | |
| E | | |

## Overall analysis of all Ad Breaks during Observation 1

A. Based on the previous three ad breaks, complete the following table:

| Column A | Column B | Column C | Column D |
|---|---|---|---|
| | **Total length of ad break in seconds** **(or best estimate if viewers return after ad break has ended)** | **Total time spent on channels <u>other than</u> the programme channel (in seconds)** | **Time spent on other channels as a % of total ad time** **<u>Col C</u> x 100** **Col B** |
| Ad break 1 | | | |
| Ad break 2 | | | |
| Ad break 3 | | | |
| **Total of columns B and C** | | | |

B. Complete the following table by noting how many seconds each person spent out of the viewing room during each observation session and compute the total

| | **Person A** | **Person B** | **Person C** | **Person D** | **Person E** |
|---|---|---|---|---|---|
| Ad break 1 | | | | | |
| Ad break 2 | | | | | |
| Ad break 3 | | | | | |
| **Total** | | | | | |

**Appendix 22**

**Main study - Letter to Potential Survey Participants**

**Information for potential survey participants**

This study is designed to measure whether and how often television viewers use the remote control to switch channels during the advertising breaks. Since we tend to be self-conscious when we know that we're being watched, the observer was instructed to pretend to be completing a university assignment when, in fact, they were observing viewers' channel switching behaviour. This means that the data collected are realistic and therefore more accurate.

If you agree to participate in this study, please complete the survey that is given to you by the observer. Since you are not required to give your name at any time, you are guaranteed anonymity. Should you not want to take part in the study, the observation data collected will be ignored and no further information is required.

If you do agree to assist in this study, please proceed with the completion of the survey. This will indicate to the researcher that you have agreed to take part in the study.

Thank you for your time

Steve Dix

Name of researcher: Steve Dix
Telephone: 9266 7246
Email: dixs@cbs.curtin.edu.au

Research Supervisor: Dr Ian Phau
Telephone: 9266 4014
Email: phaui@cbs.curtin.edu.au

**Appendix 23**

**Main Study Survey**

The Survey was only handed to those viewers during the fourth and final observation session. This was to retain the disguised nature of the observation. Observers were required to acknowledge the true nature of the assignment and provide viewers with an information sheet to verify that the research was gathered for a university assignment.

Instructions to the observer were provided as follows:

"Only once all four observation sessions are successfully completed is the self completing questionnaire introduced.

Immediately after the final observation is conducted, you can acknowledge that you have been observing the viewers' behaviour and you may provide an explanation as follows:

*"The university assignment that I am required to do was to observe household members watching television. This was a hidden observation which means that you were not supposed to be aware that you were being observed".*

An information sheet is attached that can be shown to viewers to support your explanation.

Introduce the survey and ask all viewers to complete the questionnaire. Remind them that it is an anonymous survey and their names are not required to appear anywhere. The survey takes no longer than fifteen minutes to complete".

*(Hand out a copy of the self completion questionnaire to all viewers of the final observation session and request that they complete the survey immediately in private)*

## Television Survey Person A

Thanks for your time in completing this survey! The aim of this survey is to get your feedback on what you were watching during the past 30 minutes and to gather your views on television. There are no right or wrong answers – only what you remember or your opinions are important.

**Section A**

**The following questions apply to your viewing during the past 30 minutes**

1. To what extent were you aware that you were being observed during the past 30 minutes of television viewing? *(Tick the appropriate box)*

□ Not at all aware
□ Somewhat aware
□ Aware
□ Strongly aware

2. List <u>all channels</u> that the television was tuned to over the past 30 minutes

□ ABC
□ Channel 7
□ Channel 9
□ Channel 10
□ SBS
□ Any Foxtel channel

3. Which best describes your viewing during the past 30 minutes? *(Tick all appropriate boxes)*

□ I was watching a particular programme
□ I watch this programme as often as I can
□ I was looking to see if there was anything on that I wanted to watch
□ I wanted to watch something and was browsing to see what was on
□ I had been watching previously and stayed to see what else was on
□ I had nothing better to do and so ended up watching TV
□ Other (please specify) _____

4. Did you plan to watch the programme that you have viewed during the past 30 minutes?

□ Yes
□ No

5. Would you prefer to have watched another programme during the past 30 minutes?

□ Yes
□ No

6. Estimate how many of the 30 minutes were spent on channels other than the one you were mostly watching:

_____ *minutes*

7. Estimate how many times you <u>personally</u> used the remote control to make channel changes during the past 30 minute viewing period?

□ None
□ 1 – 2 times
□ 3 – 4 times
□ 5 – 6 times
□ 7 or more times

8. To what extent was your use of the remote control during the past 30 minute viewing typical of how you usually switch channels during advertising breaks?

□ Much the *same* as always
□ I switched *more often* than I usually do
□ I switched *much more often* than I usually do
□ I switched *less often* than I usually do
□ I switched *much less often* than I usually do

**Section B**

**The following questions apply to your television viewing in general**

9. The amount of advertising on television is…… *(circle the selected number)*

Not excessive 1 2 3 4 5 6 7 Excessive

10. The amount of advertising on television is……. *(circle the selected number)*

Not Irritating 1 2 3 4 5 6 7 Irritating

11. On average, what percentage (%) of the ads do you think that miss on the channel that you are watching because the channel has been switched?
_____ *%*

12. On average, what percentage (%) of the ads do you think that you miss on the channel you are watching because you have left the room?
_____ *%*

13. When a number of TV ads are clustered together, this is called an 'ad break'. Please answer the following questions in relation to the *ad break*.

(a) How many ad breaks do you think there are every 30 minutes?
_____ *ad breaks per 30 minutes*

(b) Estimate how many minutes you think that each ad break lasts:
_____ *minutes*

(c) On average, how many ads do you think that there are in each ad break?
_____ *ads*

14. Rate each of the following in terms of how often they apply to your decision to switch or not to switch channels. There are no right or wrong answers. Only your personal opinion matters. Please note your answer by circling **one** number on each line.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| I switch whenever an advertising break comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch only if an irritating ad comes on | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that has been repeated too often | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if an ad comes on that I have seen very recently | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch if I dislike the commercial | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because there are too many ads on television these days | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch to see what else is on other channels | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch out of habit | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch because the ads disrupt the programme that I am watching | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch so that I can watch two programmes at the same time | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch when I have the remote control within my reach | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |
| I switch when a product is advertised that has nothing to do with me | Never 1 | 2 | 3 | 4 | 5 | 6 | Always 7 |

15. Given below are some statements about advertising. There are no right or wrong answers. Only your personal opinion matters. Please note your answer by circling **one** number on each line.

| | |
|---|---|
| I think that television advertising is interesting | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is enjoyable | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is informative | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |
| I think that television advertising is believable | Strongly disagree 1 2 3 4 5 6 7 Strongly agree |

| | |
|---|---|
| Rate your overall liking or disliking of television advertising | Very disliked 1 2 3 4 5 6 7 Very liked |
| If you could buy an affordable device that automatically cuts out television advertising, would you consider buying it? | No way 1 2 3 4 5 6 7 Definitely |

16. On average, how many hours of television do you estimate that you watch each day?

- ☐ Less than 1 hour per day
- ☐ Between 1 and 2 hours per day
- ☐ Between 2 and 3 hours per day
- ☐ Between 3 and 4hours per day
- ☐ Between 4 and 5 hours per day
- ☐ More than 5 hours per day

17. Would you rate yourself as a light, medium or heavy television viewer?

- ☐ Light
- ☐ Medium
- ☐ Heavy

18. Indicate your educational status based on the options below:

- ☐ Currently at secondary school
- ☐ Completed part or all secondary schooling and am not studying further
- ☐ Currently enrolled for a degree or diploma
- ☐ Completed a Tafe or college diploma
- ☐ Completed an undergraduate university degree or diploma
- ☐ Completed a post-graduate qualification
- ☐ Other _____

19. Approximately how old were you when you first had regular access to television?

_____ *years old*

20. Please tick your country of origin

- ☐ Australia
- ☐ Singapore
- ☐ Italy
- ☐ Indonesia
- ☐ Malaysia
- ☐ UK
- ☐ Other (please specify) _____

21. ***Please answer this question only if you have Foxtel in your household.***
What percentage of your viewing time do you estimate that you watch channels on Foxtel? *(tick one category only)*

- ☐ 0 – 25%
- ☐ 26 – 50%
- ☐ 51 – 75%
- ☐ 76 – 100%

Thank you for your assistance with this survey

## Appendix 24

## Factor Analysis – Four item Attitude Scale

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .713 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1200.134 |
| | df | 6 |
| | Sig. | .000 |

**Communalities**

| | Initial | Extraction |
|---|---|---|
| Interesting | 1.000 | .673 |
| Enjoyable | 1.000 | .730 |
| Informative | 1.000 | .645 |
| Believable | 1.000 | .458 |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 2.506 | 62.660 | 62.660 | 2.506 | 62.660 | 62.660 |
| 2 | .766 | 19.140 | 81.800 | | | |
| 3 | .453 | 11.319 | 93.119 | | | |
| 4 | .275 | 6.881 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

**Component Matrix(a)**

| | Component 1 |
|---|---|
| Enjoyable | .855 |
| Interesting | .820 |
| Informative | .803 |
| Believable | .677 |

Extraction Method: Principal Component Analysis.
a 1 components extracted.

## Appendix 25

## Correlation between average attitude (mean of 4-item scale) and overall attitude to Advertising

### Correlations

| | | AverageAttitude | AttitudeAdv |
|---|---|---|---|
| AverageAttitude | Pearson Correlation | 1 | .697(**) |
| | Sig. (2-tailed) | | .000 |
| | N | 848 | 848 |
| AttitudeAdv | Pearson Correlation | .697(**) | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 848 | 848 |

** Correlation is significant at the 0.01 level (2-tailed).

## Reliability – 4-item Attitude scale

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .799 | 4 |

**Item-Total Statistics**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| Interesting | 10.31 | 10.475 | .638 | .735 |
| Enjoyable | 10.73 | 10.175 | .697 | .705 |
| Informative | 10.09 | 10.795 | .635 | .738 |
| Believable | 10.86 | 11.912 | .483 | .809 |

## Appendix 26

## Variable Characteristics

**Independent Variables**

| | | PerceivedClutter | AttitudeAdv | SituationalTrigger |
|---|---|---|---|---|
| N | Valid | 848 | 848 | 848 |
| | Missing | 0 | 0 | 0 |
| Mean | | 26.48 | 3.35 | 4.7856 |
| Std. Error of Mean | | .396 | .044 | .04742 |
| Median | | 25.00 | 3.00 | 5.0000 |
| Mode | | 30 | 4 | 4.60 |
| Std. Deviation | | 11.533 | 1.276 | 1.38077 |
| Variance | | 133.015 | 1.628 | 1.907 |
| Skewness | | .330 | -.010 | -.728 |
| Std. Error of Skewness | | .084 | .084 | .084 |
| Kurtosis | | -.703 | -.700 | .155 |
| Std. Error of Kurtosis | | .168 | .168 | .168 |
| Range | | 46 | 6 | 6.00 |
| Minimum | | 3 | 1 | 1.00 |
| Maximum | | 49 | 7 | 7.00 |

**Independent Variables**

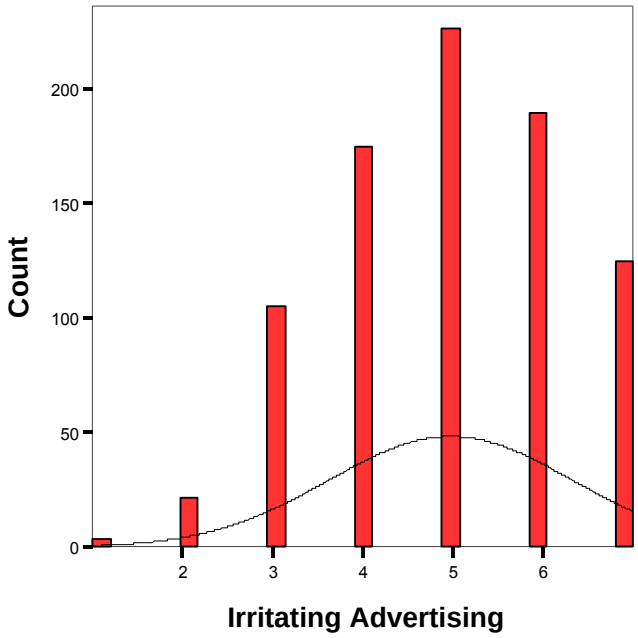
| | | RCDEmpowerment | Respondent Age | Education |
|---|---|---|---|---|
| N | Valid | 848 | 848 | 848 |
| | Missing | 0 | 0 | 0 |
| Mean | | 4.2074 | 27.30 | 3.62 |
| Std. Error of Mean | | .04147 | .418 | .049 |
| Median | | 4.2500 | 22.00 | 3.00 |
| Mode | | 4.67 | 20 | 3 |
| Std. Deviation | | 1.20774 | 12.160 | 1.418 |
| Variance | | 1.459 | 147.857 | 2.012 |
| Skewness | | -.190 | 1.423 | .310 |
| Std. Error of Skewness | | .084 | .084 | .084 |
| Kurtosis | | -.299 | .603 | -.360 |
| Std. Error of Kurtosis | | .168 | .168 | .168 |
| Range | | 6.00 | 52 | 6 |
| Minimum | | 1.00 | 15 | 1 |
| Maximum | | 7.00 | 67 | 7 |

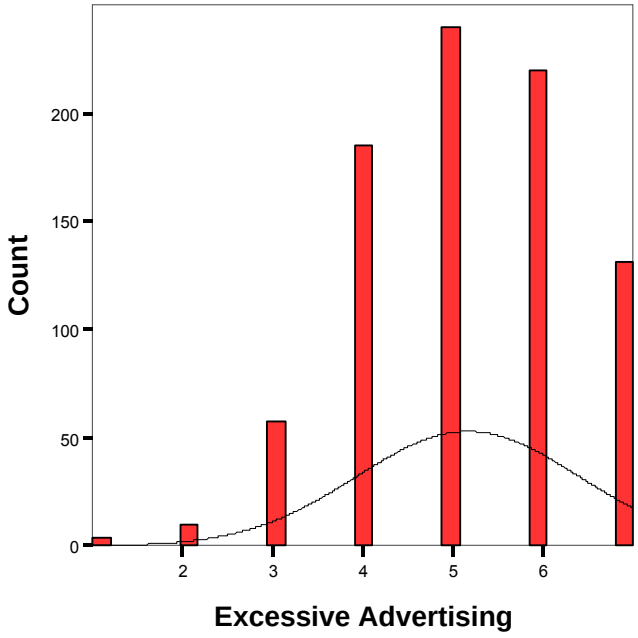
**Dependent Variables**

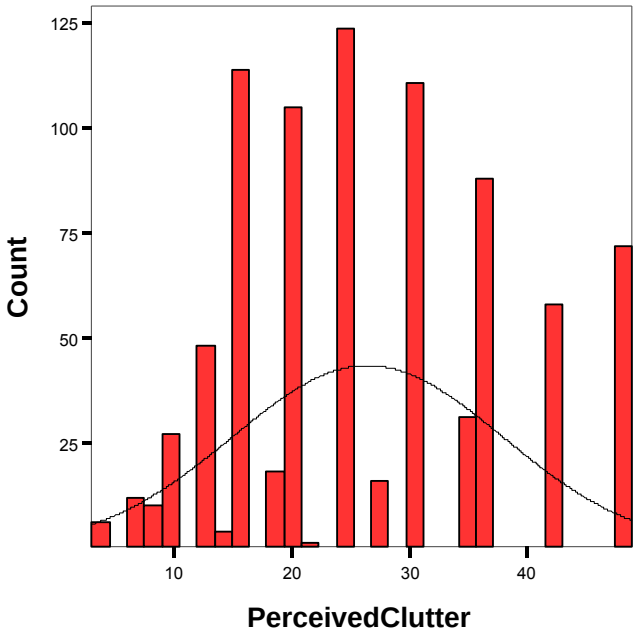
| | | RepPROPZAP | ObsPROPZAP | AveZaps |
|---|---|---|---|---|
| N | Valid | 848 | 848 | 848 |
| | Missing | 0 | 0 | 0 |
| Mean | | 46.96 | 36.7939 | 3.0800 |
| Std. Error of Mean | | .927 | .82072 | .11907 |
| Median | | 50.00 | 37.2000 | 2.0000 |
| Mode | | 50 | .00 | .00 |
| Std. Deviation | | 26.982 | 23.89987 | 3.46738 |
| Variance | | 728.043 | 571.204 | 12.023 |
| Skewness | | -.061 | .098 | 1.513 |
| Std. Error of Skewness | | .084 | .084 | .084 |
| Kurtosis | | -1.145 | -.856 | 2.421 |
| Std. Error of Kurtosis | | .168 | .168 | .168 |
| Range | | 100 | 97.06 | 18.75 |
| Minimum | | 0 | .00 | .00 |
| Maximum | | 100 | 97.06 | 18.75 |

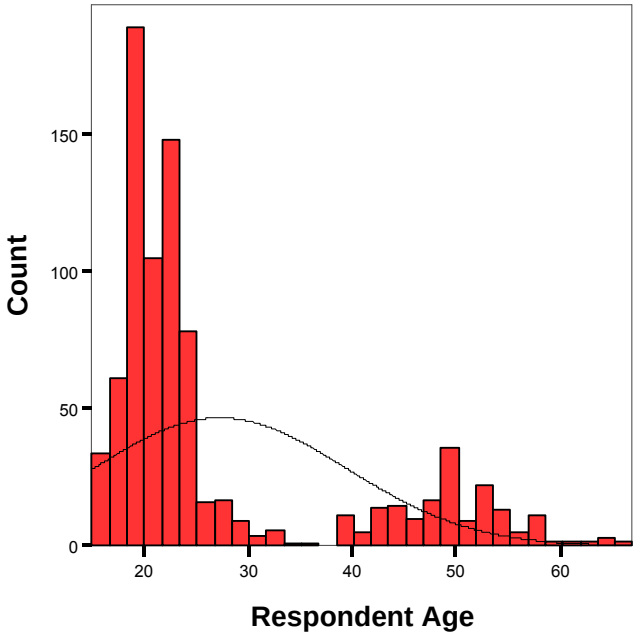
**Appendix 27**

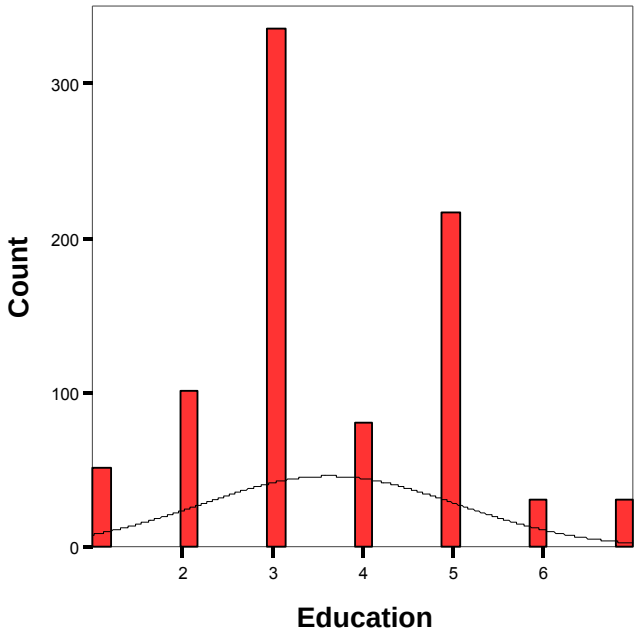
**Tests for Normality of data**

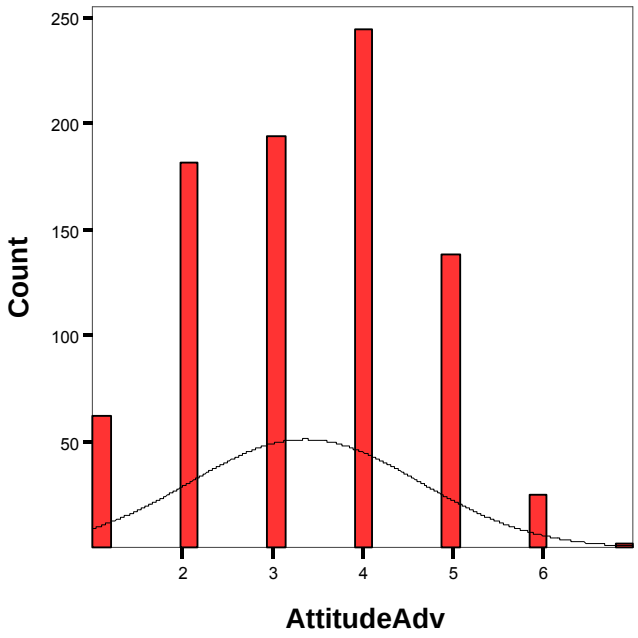


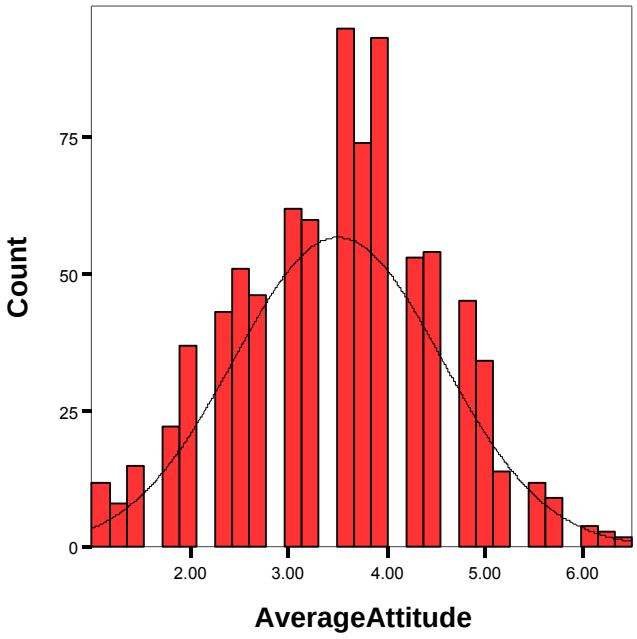



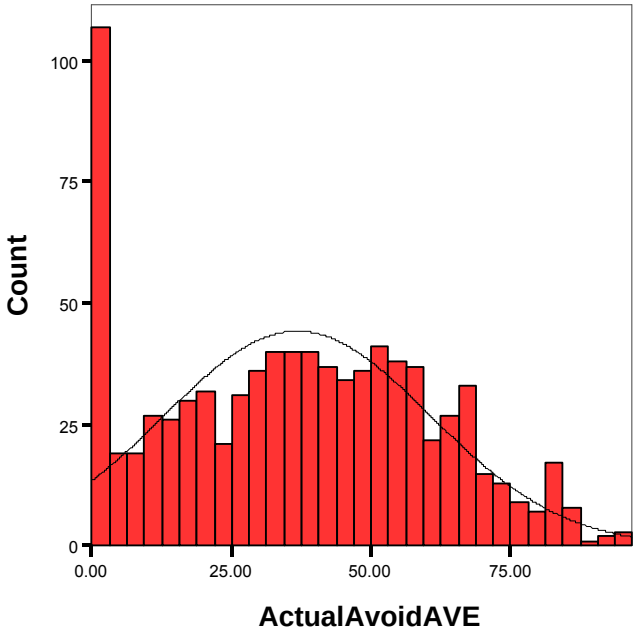

125
100
75
50
25
Count
10
20
30
40
PerceivedClutter

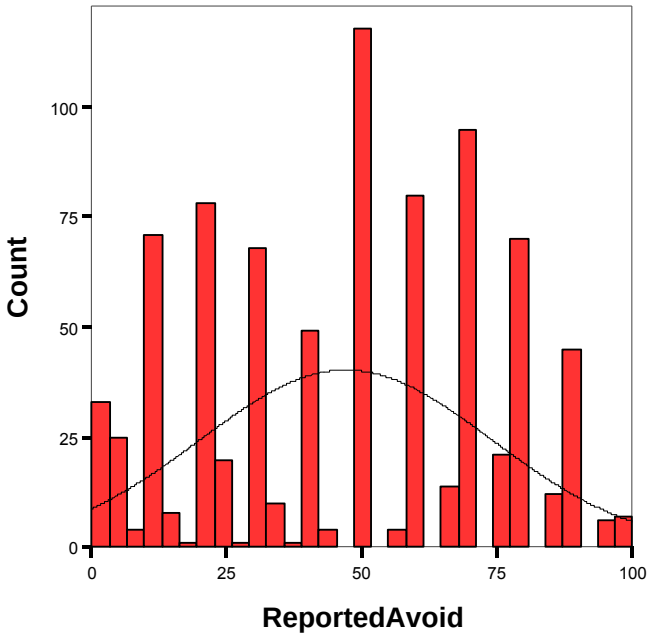

150
100
50
0
Count
20
30
40
50
60
Respondent Age


Count
300
200
100
0
2
3
4
5
6
Education


Count
250
200
150
100
50
2
3
4
5
6
AttitudeAdv


Count
75
50
25
0
2.00
3.00
4.00
5.00
6.00
AverageAttitude


Count
100
75
50
25
0
0.00
25.00
50.00
75.00
ActualAvoidAVE


Count
100
75
50
25
0
0
25
50
75
100
ReportedAvoid

## Appendix 28

## Multiple Regression

**Correlations Matrix**

| | | ActPROPZAP | Perceived Clutter | Cable Access | Attitude TV advertising | RCD Empowerment | Advertising Triggers | Viewer Age | Viewer Gender |
|---|---|---|---|---|---|---|---|---|---|
| Pearson Correlation | ActPROPZAP | 1.000 | -.038 | .000 | .039 | .257 | .162 | -.164 | -.028 |
| | Perceived Clutter | -.038 | 1.000 | -.049 | -.348 | .123 | .247 | .152 | -.024 |
| | Cable Access | .000 | -.049 | 1.000 | -.016 | .010 | .020 | -.142 | .007 |
| | Attitude TV advertising | .039 | -.348 | -.016 | 1.000 | .025 | -.050 | -.154 | .098 |
| | RCD Empowerment | .257 | .123 | .010 | .025 | 1.000 | .636 | -.263 | -.025 |
| | Advertising Triggers | .162 | .247 | .020 | -.050 | .636 | 1.000 | -.130 | -.020 |
| | Viewer Age | -.164 | .152 | -.142 | -.154 | -.263 | -.130 | 1.000 | .004 |
| | Viewer Gender | -.028 | -.024 | .007 | .098 | -.025 | -.020 | .004 | 1.000 |
| Sig. (1-tailed) | ActPROPZAP | . | .137 | .495 | .128 | .000 | .000 | .000 | .208 |
| | Perceived Clutter | .137 | . | .077 | .000 | .000 | .000 | .000 | .243 |
| | Cable Access | .495 | .077 | . | .323 | .388 | .285 | .000 | .420 |
| | Attitude TV advertising | .128 | .000 | .323 | . | .237 | .071 | .000 | .002 |
| | RCD Empowerment | .000 | .000 | .388 | .237 | . | .000 | .000 | .232 |
| | Advertising Triggers | .000 | .000 | .285 | .071 | .000 | . | .000 | .282 |
| | Viewer Age | .000 | .000 | .000 | .000 | .000 | .000 | . | .450 |
| | Viewer Gender | .208 | .243 | .420 | .002 | .232 | .282 | .450 | . |
| N | ActPROPZAP | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Perceived Clutter | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Cable Access | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Attitude TV advertising | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | RCD Empowerment | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Advertising Triggers | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Viewer Age | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Viewer Gender | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |

**ANOVA(b)**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 38620.013 | 7 | 5517.145 | 10.410 | .000(a) |
| | Residual | 445189.399 | 840 | 529.987 | | |
| | Total | 483809.411 | 847 | | | |

a Predictors: (Constant), Viewer Gender, Viewer Age, Advertising Triggers, Cable Access, Attitude TV advertising, Perceived Clutter, RCD Empowerment
b Dependent Variable: ActPROPZAP

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .283(a) | .080 | .072 | 23.02145 | .080 | 10.410 | 7 | 840 | .000 | 1.002 |

a Predictors: (Constant), Viewer Gender, Viewer Age, Advertising Triggers, Cable Access, Attitude TV advertising, Perceived Clutter, RCD Empowerment
b Dependent Variable: ActPROPZAP

**Coefficients(a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95% Confidence Interval for B | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Tolerance | VIF |
| 1 | (Constant) | 26.237 | 6.080 | | 4.316 | .000 | 14.304 | 38.171 | | |
| | Perceived Clutter | -.117 | .076 | -.056 | -1.531 | .126 | -.267 | .033 | .806 | 1.240 |
| | Cable Access | -1.420 | 2.482 | -.019 | -.572 | .567 | -6.293 | 3.452 | .975 | 1.026 |
| | Attitude TV advertising | .045 | .807 | .002 | .055 | .956 | -1.540 | 1.629 | .856 | 1.168 |
| | RCD Empowerment | 4.476 | .874 | .226 | 5.119 | .000 | 2.759 | 6.192 | .561 | 1.782 |
| | Advertising Triggers | .336 | .761 | .019 | .441 | .659 | -1.158 | 1.830 | .566 | 1.766 |
| | Viewer Age | -.188 | .070 | -.096 | -2.697 | .007 | -.325 | -.051 | .871 | 1.148 |
| | Viewer Gender | -1.091 | 1.590 | -.023 | -.686 | .493 | -4.212 | 2.029 | .989 | 1.011 |

a Dependent Variable: ActPROPZAP

## Appendix 29

## Case Summaries – Outliers and Influential Cases Observed PROPZAP

| Outlier | | Case Number | Mahalanobis Distance | Cook's Distance | Centered Leverage |
|---|---|---|---|---|---|
| 1 | | 39 | 12.25865 | .01068 | .01447 |
| 2 | | 45 | 2.54335 | .00272 | .00300 |
| 3 | | 85 | 13.74769 | .01227 | .01623 |
| 4 | | 95 | 13.37466 | .01323 | .01579 |
| 5 | | 99 | 13.09105 | .00999 | .01546 |
| 6 | | 191 | 6.81366 | .00529 | .00804 |
| 7 | | 270 | 5.63332 | .00407 | .00665 |
| 8 | | 311 | 5.90586 | .00571 | .00697 |
| 9 | | 425 | 7.13232 | .00512 | .00842 |
| 10 | | 430 | 20.91140 | .01957 | .02469 |
| 11 | | 487 | 15.01939 | .01265 | .01773 |
| 12 | | 556 | 4.81573 | .00380 | .00569 |
| 13 | | 563 | 7.69252 | .00733 | .00908 |
| 14 | | 609 | 1.89930 | .00195 | .00224 |
| 15 | | 688 | 8.54960 | .00627 | .01009 |
| 16 | | 706 | 5.05970 | .00394 | .00597 |
| 17 | | 727 | 2.60513 | .00294 | .00308 |
| 18 | | 728 | 3.36840 | .00346 | .00398 |
| 19 | | 820 | 4.21730 | .00330 | .00498 |
| Total | N | | 19 | 19 | 19 |

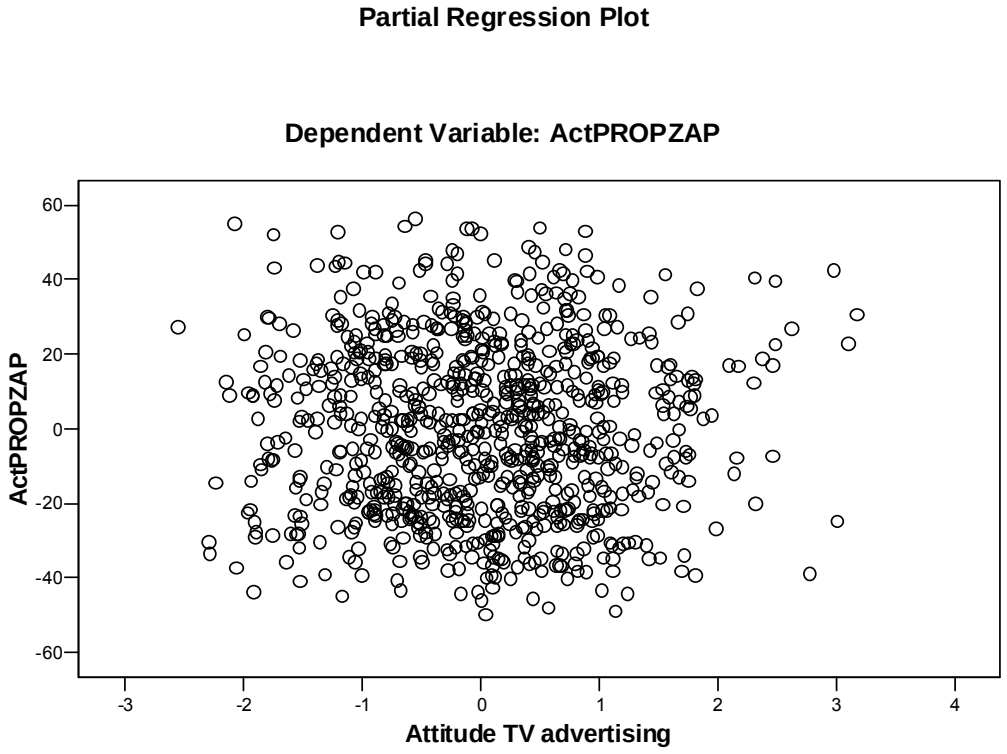
## Appendix 30

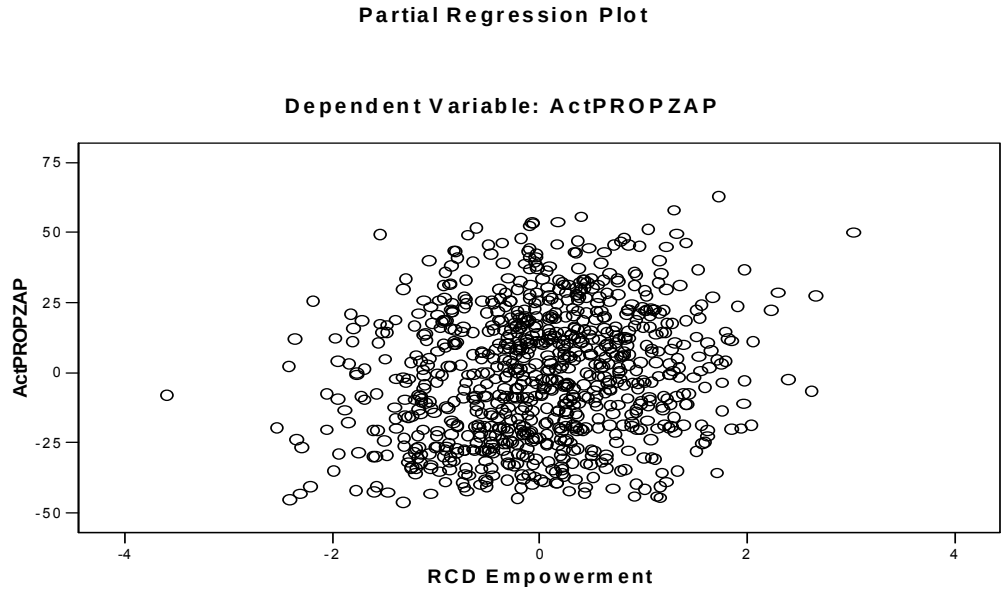
### Case Summaries – Outliers and Influential Cases Reported PROPZAP

| | | | Case Number | Mahalanlobis Distance | Cook's Distance | Centered Leverage |
|---|---|---|---|---|---|---|
| 1 | 1 | | 44 | 10.11096 | .00738 | .01194 |
| | 2 | | 84 | 4.71418 | .00373 | .00557 |
| | 3 | | 191 | 6.81366 | .00708 | .00804 |
| | 4 | | 200 | 6.46300 | .00470 | .00763 |
| | 5 | | 229 | 6.25611 | .00464 | .00739 |
| | 6 | | 279 | 13.83347 | .01339 | .01633 |
| | 7 | | 293 | 5.54919 | .00628 | .00655 |
| | 8 | | 312 | 6.95742 | .00826 | .00821 |
| | 9 | | 313 | 6.95827 | .00597 | .00822 |
| | 10 | | 318 | 11.40036 | .00789 | .01346 |
| | 11 | | 327 | 12.41340 | .00857 | .01466 |
| | 12 | | 373 | 4.83583 | .00362 | .00571 |
| | 13 | | 378 | 6.30264 | .00741 | .00744 |
| | 14 | | 399 | 20.88340 | .01501 | .02466 |
| | 15 | | 405 | 9.68879 | .01554 | .01144 |
| | 16 | | 422 | 4.33025 | .00329 | .00511 |
| | 17 | | 463 | 9.67922 | .00777 | .01143 |
| | 18 | | 467 | 10.81927 | .00796 | .01277 |
| | 19 | | 516 | 5.50825 | .00655 | .00650 |
| | 20 | | 647 | 3.30140 | .00276 | .00390 |
| | 21 | | 666 | 2.68140 | .00246 | .00317 |
| | 22 | | 681 | 17.89734 | .02244 | .02113 |
| | 23 | | 794 | 7.27689 | .00594 | .00859 |
| | 24 | | 845 | 6.43240 | .00596 | .00759 |
| | Total | N | | 24 | 24 | 24 |

**Appendix 31**

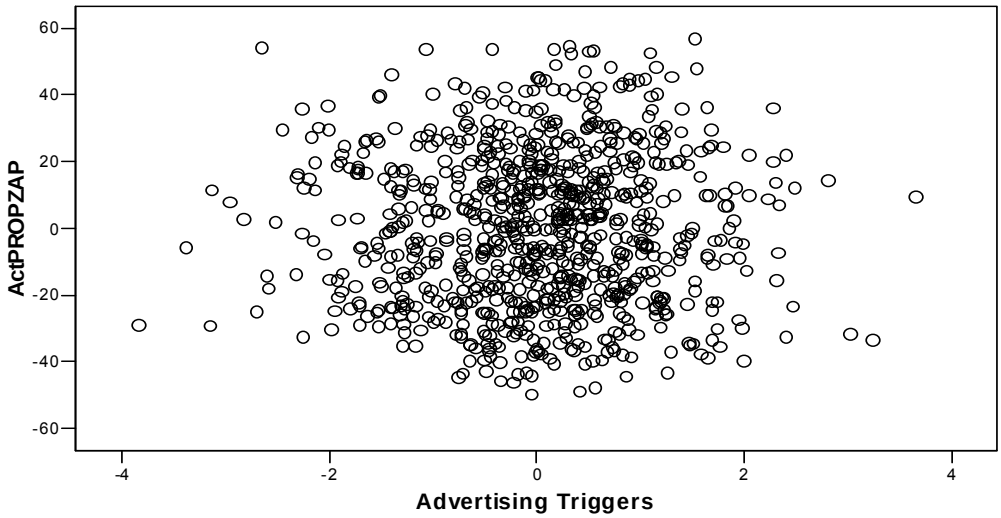
**Partial Plots**



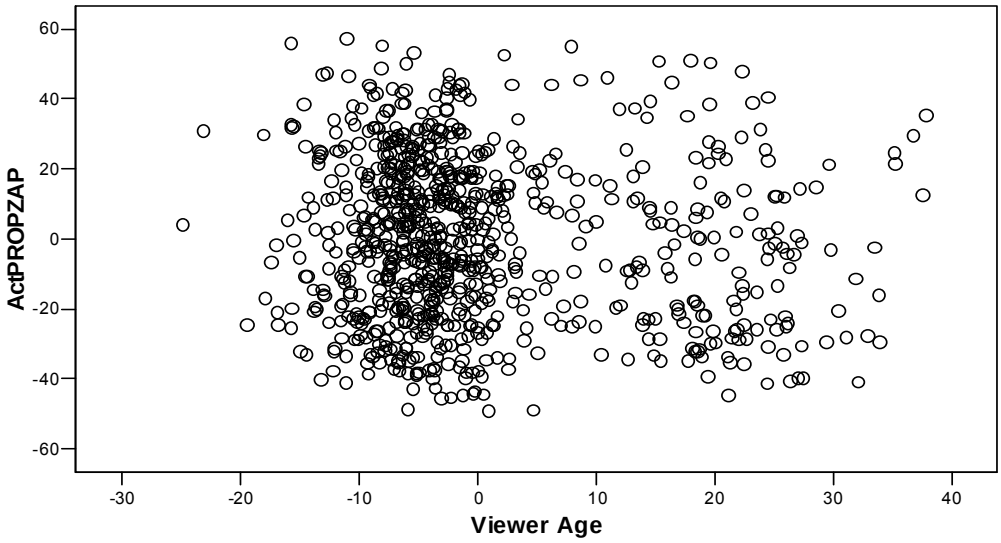
**Partial Regression Plot**

**Dependent Variable: ActPROPZAP**

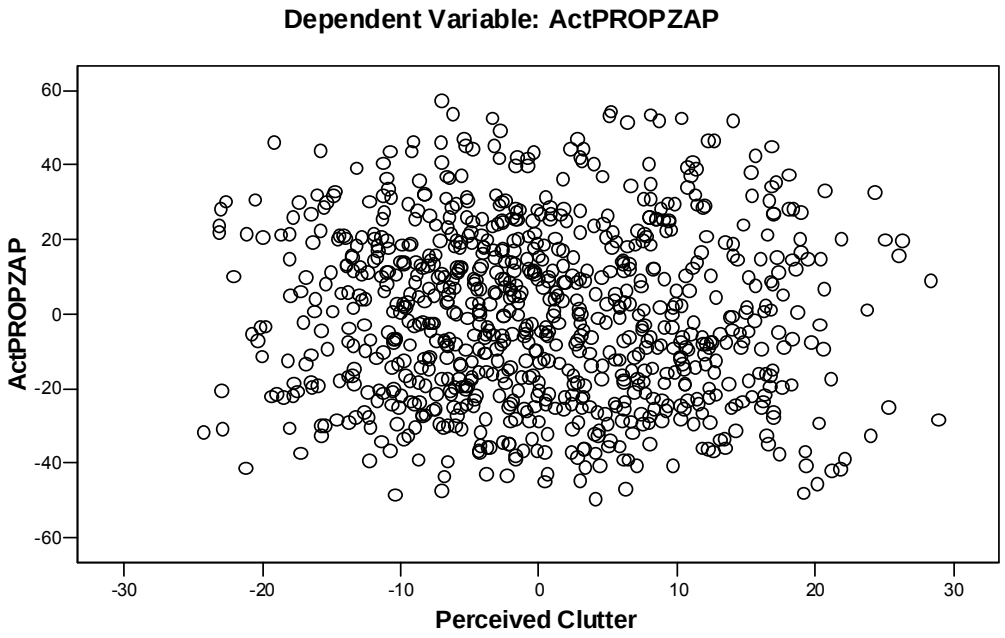



**Partial Regression Plot**

**Dependent Variable: ActPROPZAP**



**Partial Regression Plot**



## Appendix 32

## Partial Correlations – Reported PROPZAP

**Correlations**

| | | RepPROPZAP | Perceived Clutter | Attitude TV advertising | Cable Access | Advertising Triggers | RCD Empowerment | Viewer Age | Respondent Sex |
|---|---|---|---|---|---|---|---|---|---|
| Pearson Correlation | RepPROPZAP | 1.000 | .187 | -.021 | -.041 | .360 | .381 | -.102 | .006 |
| | Perceived Clutter | .187 | 1.000 | -.348 | -.049 | .247 | .123 | .152 | -.024 |
| | Attitude TV advertising | -.021 | -.348 | 1.000 | -.016 | -.050 | .025 | -.154 | .098 |
| | Cable Access | -.041 | -.049 | -.016 | 1.000 | .020 | .010 | -.142 | .007 |
| | Advertising Triggers | .360 | .247 | -.050 | .020 | 1.000 | .636 | -.130 | -.020 |
| | RCD Empowerment | .381 | .123 | .025 | .010 | .636 | 1.000 | -.263 | -.025 |
| | Viewer Age | -.102 | .152 | -.154 | -.142 | -.130 | -.263 | 1.000 | .004 |
| | Respondent Sex | .006 | -.024 | .098 | .007 | -.020 | -.025 | .004 | 1.000 |
| Sig. (1-tailed) | RepPROPZAP | . | .000 | .274 | .115 | .000 | .000 | .002 | .432 |
| | Perceived Clutter | .000 | . | .000 | .077 | .000 | .000 | .000 | .243 |
| | Attitude TV advertising | .274 | .000 | . | .323 | .071 | .237 | .000 | .002 |
| | Cable Access | .115 | .077 | .323 | . | .285 | .388 | .000 | .420 |
| | Advertising Triggers | .000 | .000 | .071 | .285 | . | .000 | .000 | .282 |
| | RCD Empowerment | .000 | .000 | .237 | .388 | .000 | . | .000 | .232 |
| | Viewer Age | .002 | .000 | .000 | .000 | .000 | .000 | . | .450 |
| | Respondent Sex | .432 | .243 | .002 | .420 | .282 | .232 | .450 | . |
| N | RepPROPZAP | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Perceived Clutter | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Attitude TV advertising | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Cable Access | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Advertising Triggers | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | RCD Empowerment | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Viewer Age | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |
| | Respondent Sex | 848 | 848 | 848 | 848 | 848 | 848 | 848 | 848 |

**Model Summary(b)**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .429(a) | .184 | .177 | 24.474 | .184 | 27.071 | 7 | 840 | .000 | 1.667 |

a Predictors: (Constant), Respondent Sex, Viewer Age, Advertising Triggers, Cable Access, Attitude TV advertising, Perceived Clutter, RCD Empowerment
b Dependent Variable: RepPROPZAP

**ANOVA(b)**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 113506.562 | 7 | 16215.223 | 27.071 | .000(a) |
| | Residual | 503145.735 | 840 | 598.983 | | |
| | Total | 616652.297 | 847 | | | |

a Predictors: (Constant), Respondent Sex, Viewer Age, Advertising Triggers, Cable Access, Attitude TV advertising, Perceived Clutter, RCD Empowerment
b Dependent Variable: RepPROPZAP

## Appendix 33

## Planned/Impulse viewing

**Group Statistics**

| | Planned/Impulse Viewing | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| O4solo | .00 | 78 | 33.5623 | 28.28739 | 3.20292 |
| | 1.00 | 45 | 31.2227 | 31.71144 | 4.72726 |

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| O4solo | Equal variances assumed | .704 | .403 | .423 | 121 | .673 | 2.33964 | 5.53699 | -8.62229 | 13.30157 |
| | Equal variances not assumed | | | .410 | 83.602 | .683 | 2.33964 | 5.71014 | -9.01639 | 13.69567 |

## Appendix 34

## Multiple Regression Reported PROPZAP

**Coefficients(a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95% Confidence Interval for B | | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Zero-order | Partial | Part | Tolerance | VIF |
| 1 | (Constant) | 2.832 | 6.822 | | .415 | .678 | -10.558 | 16.221 | | | | | |
| | Perceived Clutter | .293 | .081 | .125 | 3.604 | .000 | .133 | .452 | .187 | .123 | .112 | .806 | 1.240 |
| | Attitude TV advertising | .433 | .858 | .017 | .505 | .614 | -1.251 | 2.118 | -.021 | .017 | .016 | .856 | 1.168 |
| | Cable Access | -3.849 | 2.639 | -.046 | -1.458 | .145 | -9.029 | 1.331 | -.041 | -.050 | -.045 | .975 | 1.026 |
| | Advertising Triggers | 3.272 | .809 | .167 | 4.042 | .000 | 1.683 | 4.860 | .360 | .138 | .126 | .566 | 1.766 |
| | RCD Empowerment | 5.574 | .930 | .249 | 5.996 | .000 | 3.749 | 7.398 | .381 | .203 | .187 | .561 | 1.782 |
| | Viewer Age | -.083 | .074 | -.037 | -1.121 | .263 | -.229 | .062 | -.102 | -.039 | -.035 | .871 | 1.148 |
| | Respondent Sex | .934 | 1.690 | .017 | .552 | .581 | -2.384 | 4.251 | .006 | .019 | .017 | .989 | 1.011 |

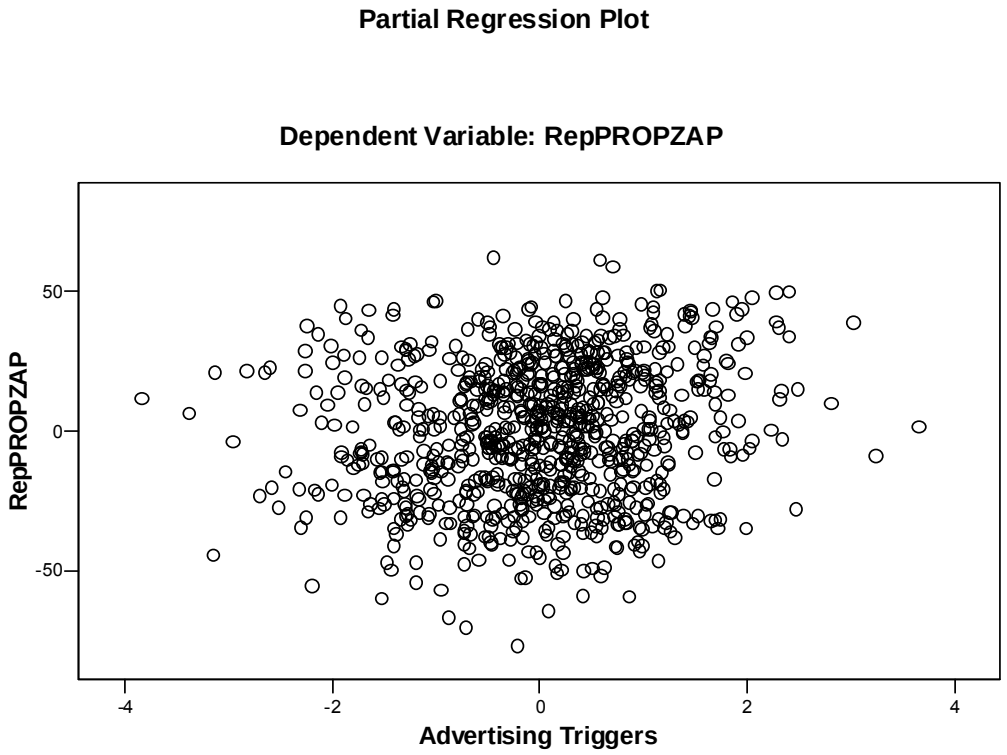
a Dependent Variable: RepPROPZAP

**Collinearity Diagnostics(a)**

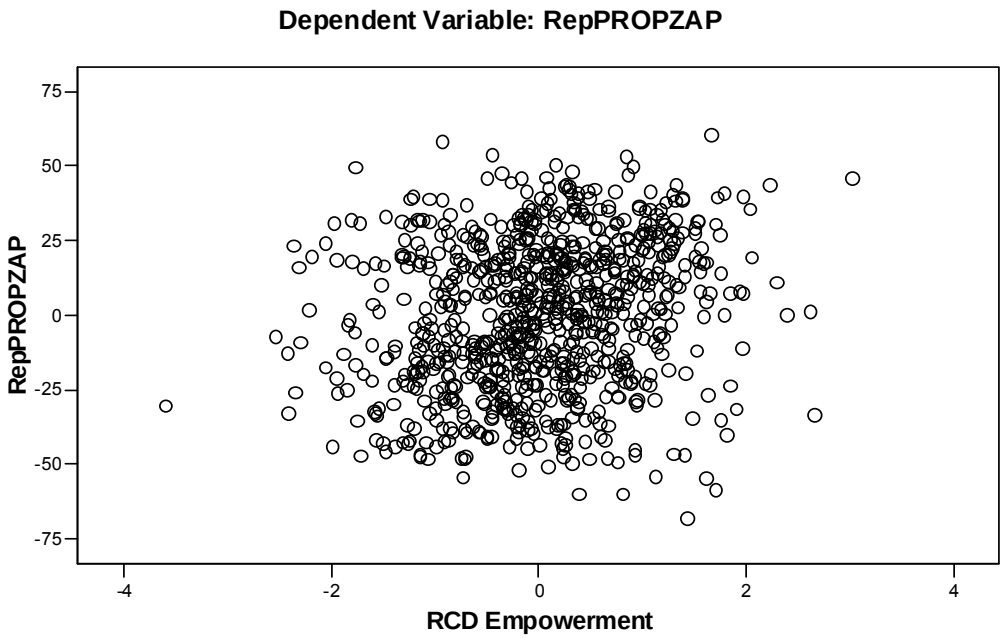
| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | (Constant) | Perceived Clutter | Attitude TV advertising | Cable Access | Advertising Triggers | RCD Empowerment | Viewer Age | Sex |
| 1 | 1 | 7.314 | 1.000 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| | 2 | .201 | 6.035 | .00 | .14 | .04 | .05 | .00 | .01 | .35 | .01 |
| | 3 | .168 | 6.601 | .00 | .28 | .05 | .00 | .03 | .02 | .21 | .04 |
| | 4 | .115 | 7.983 | .00 | .01 | .05 | .76 | .02 | .03 | .00 | .03 |
| | 5 | .095 | 8.793 | .00 | .12 | .01 | .01 | .04 | .04 | .14 | .65 |
| | 6 | .068 | 10.392 | .00 | .33 | .51 | .01 | .06 | .05 | .06 | .18 |
| | 7 | .027 | 16.503 | .01 | .00 | .02 | .00 | .85 | .73 | .01 | .00 |
| | 8 | .013 | 23.822 | .99 | .10 | .32 | .17 | .00 | .12 | .22 | .10 |

**Appendix 35**

**Partial Plots – Reported PROPZAP**

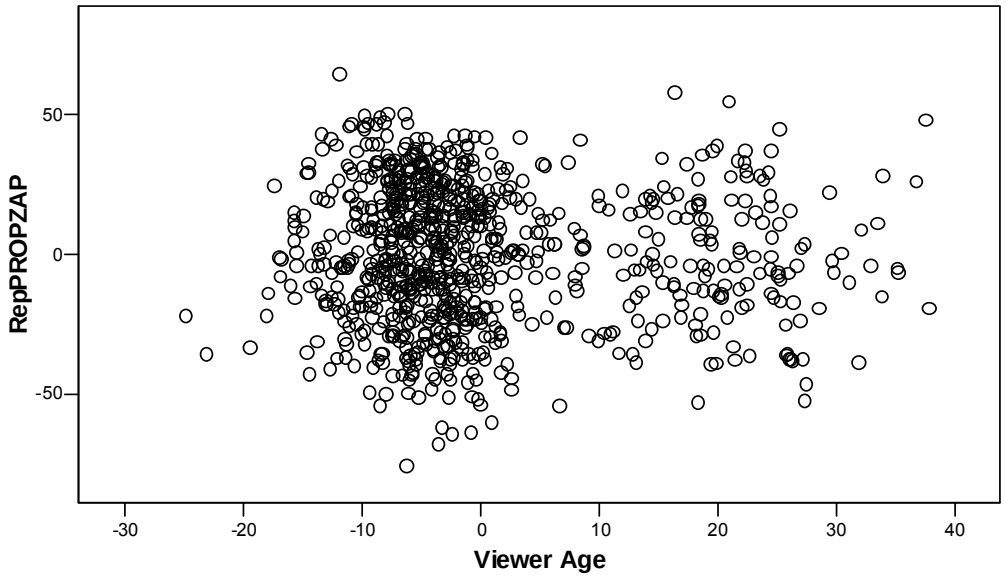


**Partial Regression Plot**



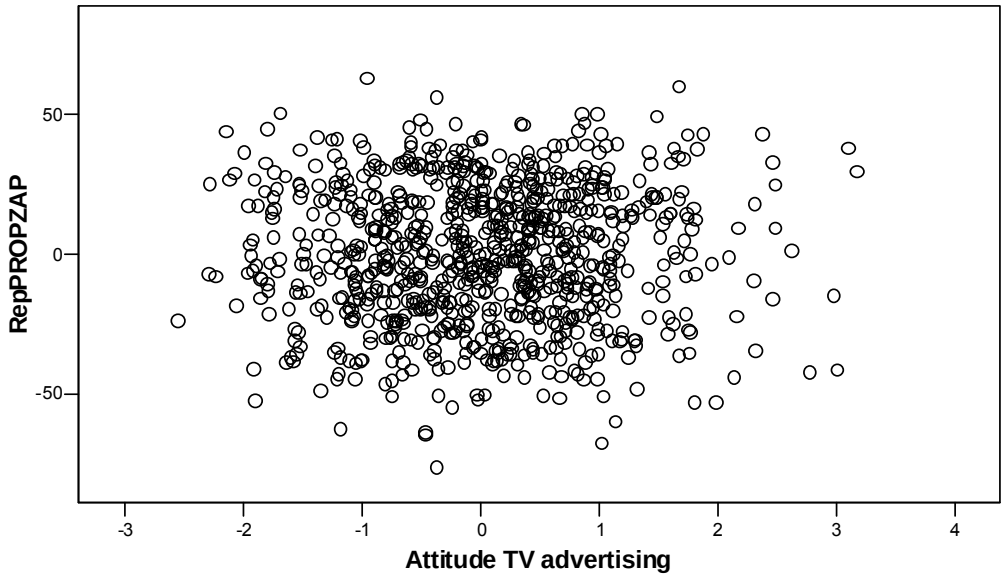
**Partial Regression Plot**

**Dependent Variable: RepPROPZAP**




**Partial Regression Plot**

**Dependent Variable: RepPROPZAP**



## Appendix 36

## Output from the ANOVA analysis – Observed PROPZAP relative to genre differences

**ANOVA**

ObsPROPZAP

| | | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|---|
| Between Groups | (Combined) | | 19755.075 | 4 | 4938.769 | 6.149 | .000 |
| | Linear Term | Unweighted | 5050.548 | 1 | 5050.548 | 6.288 | .012 |
| | | Weighted | 6517.669 | 1 | 6517.669 | 8.114 | .004 |
| | | Deviation | 13237.405 | 3 | 4412.468 | 5.493 | .001 |
| | Quadratic Term | Unweighted | 6249.702 | 1 | 6249.702 | 7.781 | .005 |
| | | Weighted | 4839.384 | 1 | 4839.384 | 6.025 | .014 |
| | | Deviation | 8398.021 | 2 | 4199.010 | 5.228 | .005 |
| Within Groups | | | 1026548.856 | 1278 | 803.246 | | |
| Total | | | 1046303.931 | 1282 | | | |

**Multiple Comparisons**

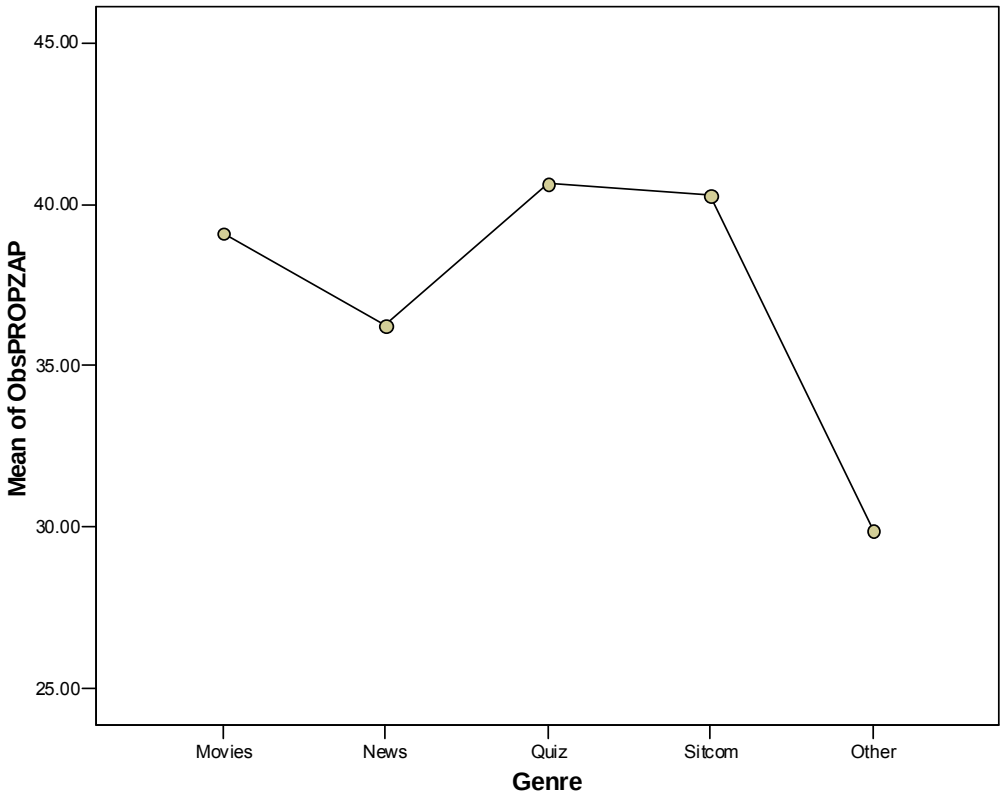
Dependent Variable: ObsPROPZAP

| | | | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|---|
| | (I) Genre | (J) Genre | | | | Lower Bound | Upper Bound |
| Gabriel | Movies | News | 2.85692 | 2.40007 | .924 | -3.7759 | 9.4898 |
| | | Quiz | -1.53435 | 2.86509 | 1.000 | -9.5647 | 6.4960 |
| | | Sitcom | -1.17265 | 2.87345 | 1.000 | -9.2257 | 6.8804 |
| | | Other | 9.19756(*) | 2.57346 | .003 | 2.0044 | 16.3907 |
| | News | Movies | -2.85692 | 2.40007 | .924 | -9.4898 | 3.7759 |
| | | Quiz | -4.39127 | 2.50650 | .536 | -11.2798 | 2.4972 |
| | | Sitcom | -4.02957 | 2.51605 | .659 | -10.9408 | 2.8816 |
| | | Other | 6.34064(*) | 2.16713 | .033 | .2893 | 12.3919 |
| | Quiz | Movies | 1.53435 | 2.86509 | 1.000 | -6.4960 | 9.5647 |
| | | News | 4.39127 | 2.50650 | .536 | -2.4972 | 11.2798 |
| | | Sitcom | .36170 | 2.96292 | 1.000 | -7.9470 | 8.6704 |
| | | Other | 10.73191(*) | 2.67299 | .001 | 3.2831 | 18.1807 |
| | Sitcom | Movies | 1.17265 | 2.87345 | 1.000 | -6.8804 | 9.2257 |
| | | News | 4.02957 | 2.51605 | .659 | -2.8816 | 10.9408 |
| | | Quiz | -.36170 | 2.96292 | 1.000 | -8.6704 | 7.9470 |
| | | Other | 10.37021(*) | 2.68195 | .001 | 2.8987 | 17.8417 |
| | Other | Movies | -9.19756(*) | 2.57346 | .003 | -16.3907 | -2.0044 |
| | | News | -6.34064(*) | 2.16713 | .033 | -12.3919 | -.2893 |
| | | Quiz | -10.73191(*) | 2.67299 | .001 | -18.1807 | -3.2831 |
| | | Sitcom | -10.37021(*) | 2.68195 | .001 | -17.8417 | -2.8987 |
| Hochberg | Movies | News | 2.85692 | 2.40007 | .930 | -3.8735 | 9.5873 |
| | | Quiz | -1.53435 | 2.86509 | 1.000 | -9.5688 | 6.5001 |
| | | Sitcom | -1.17265 | 2.87345 | 1.000 | -9.2305 | 6.8852 |
| | | Other | 9.19756(*) | 2.57346 | .004 | 1.9809 | 16.4142 |
| | News | Movies | -2.85692 | 2.40007 | .930 | -9.5873 | 3.8735 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Quiz | -4.39127 | 2.50650 | .565 | -11.4201 | 2.6376 |
| | | Sitcom | -4.02957 | 2.51605 | .686 | -11.0852 | 3.0261 |
| | | Other | 6.34064(*) | 2.16713 | .034 | .2635 | 12.4178 |
| | Quiz | Movies | 1.53435 | 2.86509 | 1.000 | -6.5001 | 9.5688 |
| | | News | 4.39127 | 2.50650 | .565 | -2.6376 | 11.4201 |
| | | Sitcom | .36170 | 2.96292 | 1.000 | -7.9471 | 8.6705 |
| | | Other | 10.73191(*) | 2.67299 | .001 | 3.2362 | 18.2276 |
| | Sitcom | Movies | 1.17265 | 2.87345 | 1.000 | -6.8852 | 9.2305 |
| | | News | 4.02957 | 2.51605 | .686 | -3.0261 | 11.0852 |
| | | Quiz | -.36170 | 2.96292 | 1.000 | -8.6705 | 7.9471 |
| | | Other | 10.37021(*) | 2.68195 | .001 | 2.8494 | 17.8911 |
| | Other | Movies | -9.19756(*) | 2.57346 | .004 | -16.4142 | -1.9809 |
| | | News | -6.34064(*) | 2.16713 | .034 | -12.4178 | -.2635 |
| | | Quiz | -10.73191(*) | 2.67299 | .001 | -18.2276 | -3.2362 |
| | | Sitcom | -10.37021(*) | 2.68195 | .001 | -17.8911 | -2.8494 |
| Games-Howell | Movies | News | 2.85692 | 2.47251 | .777 | -3.9210 | 9.6349 |
| | | Quiz | -1.53435 | 2.92209 | .985 | -9.5425 | 6.4738 |
| | | Sitcom | -1.17265 | 3.09079 | .996 | -9.6441 | 7.2988 |
| | | Other | 9.19756(*) | 2.69023 | .006 | 1.8280 | 16.5672 |
| | News | Movies | -2.85692 | 2.47251 | .777 | -9.6349 | 3.9210 |
| | | Quiz | -4.39127 | 2.40425 | .360 | -10.9850 | 2.2025 |
| | | Sitcom | -4.02957 | 2.60669 | .533 | -11.1828 | 3.1236 |
| | | Other | 6.34064(*) | 2.11640 | .024 | .5497 | 12.1316 |
| | Quiz | Movies | 1.53435 | 2.92209 | .985 | -6.4738 | 9.5425 |
| | | News | 4.39127 | 2.40425 | .360 | -2.2025 | 10.9850 |
| | | Sitcom | .36170 | 3.03647 | 1.000 | -7.9633 | 8.6867 |
| | | Other | 10.73191(*) | 2.62764 | .001 | 3.5315 | 17.9323 |
| | Sitcom | Movies | 1.17265 | 3.09079 | .996 | -7.2988 | 9.6441 |
| | | News | 4.02957 | 2.60669 | .533 | -3.1236 | 11.1828 |
| | | Quiz | -.36170 | 3.03647 | 1.000 | -8.6867 | 7.9633 |
| | | Other | 10.37021(*) | 2.81404 | .002 | 2.6556 | 18.0848 |
| | Other | Movies | -9.19756(*) | 2.69023 | .006 | -16.5672 | -1.8280 |
| | | News | -6.34064(*) | 2.11640 | .024 | -12.1316 | -.5497 |
| | | Quiz | -10.73191(*) | 2.62764 | .001 | -17.9323 | -3.5315 |
| | | Sitcom | -10.37021(*) | 2.81404 | .002 | -18.0848 | -2.6556 |
| Dunnett t (2-sided)(a) | Movies | Other | 9.19756(*) | 2.57346 | .001 | 2.8764 | 15.5188 |
| | News | Other | 6.34064(*) | 2.16713 | .013 | 1.0175 | 11.6638 |
| | Quiz | Other | 10.73191(*) | 2.67299 | .000 | 4.1662 | 17.2976 |
| | Sitcom | Other | 10.37021(*) | 2.68195 | .000 | 3.7825 | 16.9579 |

* The mean difference is significant at the .05 level.

a Dunnett t-tests treat one group as a control, and compare all other groups against it.


45.00
40.00
35.00
30.00
25.00
Mean of ObsPROPZAP
Movies
News
Quiz
Sitcom
Other
Genre

## Appendix 37

## Factor Analysis – Reasons for Channel Switching

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .903 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 4404.553 |
| | Df | 55 |
| | Sig. | .000 |

**Communalities**

| | Initial | Extraction |
|---|---|---|
| Irritating | 1.000 | .717 |
| Repeated | 1.000 | .776 |
| Seen recently | 1.000 | .667 |
| Dislike | 1.000 | .718 |
| Too many ads | 1.000 | .546 |
| See what else on | 1.000 | .487 |
| Habit | 1.000 | .639 |
| Disrupt | 1.000 | .484 |
| Two programmes | 1.000 | .493 |
| Remote within reach | 1.000 | .632 |
| Product nothing to do with me | 1.000 | .480 |

Extraction Method: Principal Component Analysis.

**Rotated Component Matrix(a)**

| | Component | |
|---|---|---|
| | 1 | 2 |
| Repeated | .852 | |
| Dislike | .833 | |
| Irritating | .823 | |
| Seen recently | .770 | |
| Too many ads | .638 | .372 |
| Remote within reach | | .779 |
| Habit | | .766 |
| Two programmes | | .696 |
| See what else on | .358 | .599 |
| Disrupt | .424 | .551 |
| Product nothing to do with me | .461 | .517 |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 3 iterations.

**Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.339 | 48.534 | 48.534 | 5.339 | 48.534 | 48.534 | 3.705 | 33.682 | 33.682 |
| 2 | 1.301 | 11.824 | 60.359 | 1.301 | 11.824 | 60.359 | 2.934 | 26.677 | 60.359 |
| 3 | .827 | 7.516 | 67.875 | | | | | | |
| 4 | .696 | 6.330 | 74.205 | | | | | | |
| 5 | .613 | 5.574 | 79.779 | | | | | | |
| 6 | .484 | 4.401 | 84.180 | | | | | | |
| 7 | .422 | 3.838 | 88.018 | | | | | | |
| 8 | .406 | 3.688 | 91.707 | | | | | | |
| 9 | .367 | 3.335 | 95.041 | | | | | | |
| 10 | .322 | 2.928 | 97.969 | | | | | | |
| 11 | .223 | 2.031 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

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